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Operating Instructions and Parts Manual
Disc, Belt and Combination Disc/Belt Sanders

Models: **J-4200A** **J-4200A-2** **J-4202A** **J-4300A** **J-4301A** **J-4400A** **J-4401A**



J-4200A Disc/Belt Sander



J-4300A Belt Sander



J-4400A Disc Sander

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Ph.: 800-274-6848
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Part No. M-414551
Revision C1 01/2014

1.0 **Warranty and Service**

JET, Wilton and Powermatic warrants every product they sell against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday

Warranty Period
The general warranty lasts for the time period specified in the literature included with your product or on the official JET, Wilton or Powermatic branded websites.

- JET, Wilton and Powermatic products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered
This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered
This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance.

Warranty Limitations
Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support
Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET, Wilton and Powermatic have Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET, Wilton or Powermatic website.

More Information
JET, Wilton and Powermatic are consistently adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET, Wilton or Powermatic website.

How State Law Applies
This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty
JET, WILTON AND POWERMATIC LIMIT ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.
JET, WILTON AND POWERMATIC SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
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JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days – Parts; Consumable items; Light-Duty Air Tools
1 Year – Motors; Machine Accessories; Heavy-Duty Air Tools; Pro-Duty Air Tools
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories
5 Year – Woodworking Machinery
Limited Lifetime – Wilton branded products; JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools

NOTE: JET, Wilton and Powermatic are divisions of JPW Industries, Inc.. References in this document to JET, Wilton and/or Powermatic also apply to JPW Industries, Inc., or any of its successors in interest to the JET, Wilton and/or Powermatic brands.

2.0 **Table of contents**

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3.0 **Safety Warnings**

General Cautions

- Misuse of this machine can cause serious injury.
- For safety, the machine must be set up, used and serviced properly.
- Read, understand and follow the instructions in the operator's and parts manual which was shipped with your machine.

When setting up the machine:

- Always avoid using the machine in damp or poorly lighted work areas.
- Always be sure the machine is securely anchored to the floor.
- Always keep the machine guards in place.
- Always put the start switch in the "OFF" position before plugging in the machine.

When using the machine:

- Never operate the machine with safety guards missing.
- Always wear safety glasses with side shields (See ANSI Z87.1)
- Never wear loose clothing or jewelry.
- Never overreach; you may slip and fall into the machine.
- Never leave the machine running while unattended.
- Always shut the machine off when not in use.

When servicing the machine:

- Always unplug the machine from the electrical power before servicing.
- Always follow the instructions in the operators and parts manual when changing accessory tools or parts.
- Never modify the machine without consulting Walter Meier (Manufacturing) Inc.

You — the stationary power tool user — hold the key to safety.

Read and follow these simple rules for best results and full benefits from your machine. Used properly, JET machinery is among the best in design and safety. However, any machine used improperly can be rendered inefficient and unsafe. It is mandatory that those who use our products be properly trained in how to use them correctly. They should read and understand the Operator's and Parts Manual as well as all labels affixed to the machine. Failure in following all of these warnings can cause serious injuries.

General Machinery Warnings

1. Always wear protective eye wear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from the breakage of the eye protection.
2. Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Rubber soled, nonslip, footwear is recommended for best footing.
3. Do not overreach. Failure to maintain a proper working position can cause you to fall into the machine or cause your clothing to get caught — pulling you into the machine.
4. Keep the guards in place and in proper working order. Do not operate the machine with the guards removed.
5. Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit.
6. Special electrical precautions should be taken when working on flammable materials.
7. Avoid accidental starts by being sure that the start switch is in the "OFF" position before plugging in the machine.
8. Never leave the machine running while unattended. The machine shall be shut off whenever it is not being used.
9. Disconnect the electrical power before servicing, whenever changing accessories or when general maintenance is done on the machine.
10. Maintain all machine tools with care. Follow all maintenance instructions for lubricating and the changing of accessories. No attempt shall be made to modify or have makeshift repairs done to the machine. This not only voids the warranty but also renders the machine unsafe.
11. If there is any risk of tipping or sliding, the machinery must be anchored to the floor.
12. Secure your work. Use clamps or a vise to hold your work, when practical. It is safer than using your hands and it frees both hands to operate the machine.
13. Never brush chips away while the machine is in operation.
14. Keep work area clean. Cluttered areas invite accidents.
15. Remove adjusting keys and wrenches before turning the machine on.
16. Use the right tool. Don't force a tool or attachment to do a job it was not designed for.
17. Use only recommended accessories and follow manufacturer's instructions pertaining to them.

18. Keep hands in sight and clear of all moving parts and cutting surfaces.
19. All visitors should be kept at a safe distance from the work area. Make your workshop completely safe by using padlocks, master switches, or by removing starter keys.
20. Know the tool you are using; its application, limitations, and potential hazards.

General Electrical Cautions

This machine should be grounded in accordance with the National Electrical Code and local codes and ordinances. The work should be done by a qualified electrician. The machine should be grounded to protect the user from electrical shock.

Wire Sizes

Caution: For circuits that are a great distance from the electrical service box, the wire size must be increased in order to deliver ample voltage to the motor. To minimize power losses and to prevent motor overheating and burnout, the use of wire sizes for branch circuits or electrical extension cords according to the following table is recommended:

Conductor length	AWG (American Wire Gauge) number	
	240 volt lines	120 volt lines
0-50 feet	No. 14	No. 14
50-100 feet	No. 14	No. 12
Over 100 feet	No. 12	No. 8

Safety Requirements for Abrasive Sanding Machines

Abrasive sanding can be hazardous to operators and bystanders. Sanding sparks, chips and dust particles thrown off by the sanding disc can cause serious injury if contacted or inhaled. To avoid such injuries you must comply with the following safety requirements:

1. Always wear protective eyewear when operating machinery. Eye wear shall be impact resistant, safety glasses with side shields which comply with ANSI Z87.1. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from the breakage of the eye protection.
2. Wear leather safety gloves, arm guards, leather aprons and safety shoes.
3. A dust collection system is recommended. The operator should also wear a dust mask at all times.
4. Additional precautions may be necessary for sanding materials which are flammable or have other hazardous properties. You should always consult the manufacturer of such materials for instructions on sanding and handling.
5. Do not force or jam the workpiece into the sanding disc.
6. Before sanding, always allow the motor to come up to operating speed, then check the sanding disc for wobble, run-out, or any unbalanced condition. If the disc is not operating accurately and smoothly, immediately stop the motor and make repairs before attempting any sanding operations.
7. Abrasive discs must be stored in a controlled environment . Relative humidity should be 35% to 50% and the temperature should be between 60° and 80° Fahrenheit. Failure to do so could cause premature disc failure.
8. Examine the face of the sanding disc carefully. Excessive sanding that wears down to the backing material can tear the disc. Never use a disc which shows backing, nicks or cuts on the surface or edge, or damage due to creasing or poor handling.
9. When installing a new disc, be certain the disc is accurately centered on the drive wheel. Failure to do so could cause a serious unbalanced condition.
10. Always present the workpiece to the wheel while resting the workpiece firmly on the table. Failure to do so could result in damage to the workpiece or throwing of the workpiece off the wheel.
11. Safety shoes which comply with ANSI Z41.1 should be worn.
12. Personal hearing protection such as ear plugs or ear muffs should be used to protect against the effect of noise exposure.

4.0 **Machine and Manual Overview**

JET Abrasive Finishing Machines are available in three different configurations: disc, belt, and combination disc and belt. Each configuration is a rugged, heavy-duty machine designed for maximum high production work in an industrial environment.

The speed of stock removal and the quality of finish achieved is determined largely by the aggressiveness of the abrasive disc or belt mounted on the machine. With very aggressive grits, these machines are typically considered grinding machines. With very fine grits, these machines are typically considered sanding machines. Whatever you call them, and however you use them, the instructions in this manual will help you use them safely and productively.

You will note there are several types of electrical systems available for these machines. All of these systems are equally effective in providing power to the grinding mechanism – however, local codes and the type of environment in which the machine is used will often be a factor in your choice of system.

Instructions in this manual assume that you are using one of the Model *J-4200A Series* Belt and Disc machines. If you have a disc only, or belt only machine, you can bypass those instructions which do not apply to you.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

⚠WARNING **Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!**

5.0 **Specifications**

Model	**Stock No.**
J-4200A	414551
J-4200A-2	414552
J-4202A	414553
J-4300A	414600
J-4301A	414601
J-4400A	414602
J-4401A	414603



J-4200A Disc/Belt Sander



J-4300A Belt Sander



J-4400A Disc Sander

	Disc/Belt Sander	**Belt Sander**	**Disc Sander**
Table size	Disc:12x16-3/8 in. (254x416mm) Belt: 7 3/8x14 3/4 in. (187x355mm)	7-3/8x14-3/4 in. (187x355mm)	12x16-3/8 in. (254x416mm)
Table tilt	(both) 45° down, 20° up	45° down, 20° up	45° down, 20° up
Miter gauge groove	(both) 3/8x3/4 in. (9.5x19mm)	3/8x3/4 in. (9.5x19mm)	3/8x3/4 in. (9.5x19mm)
Disc diameter	12 in. (305mm)	--	12 in. (305mm)
Disc Speed (no load)	1960 RPM	--	1960 RPM
Platen size	6-1/4x14-3/4 in. (159x375mm)	6-1/4x14-3/4 in. (159x375mm)	--
Belt size	6x48 in. (152x1214mm)	6x48 in. (152x1214mm)	--
Belt speed (no load)	2850 SFM	2850 SFM	--
Dust port diameter	4 in. (102mm)	4 in. (102mm)	4 in. (102mm)
Dimensions (depth, W, H)	--	--	29x17x42-3/4 in. (1070x725x4250mm)
Dimensions w/platen vertical (depthxWxH)	19x16x57-1/2 in. (475x400x1437mm)	19x16x57-1/2 in. (475x400x1437mm)	--
Dimensions w/platen Horizontal (depthxWxH)	25-1/2x16x43 in. (637x400x1075mm)	25-1/2x16x43 in. (637x400x1075mm)	--
Motor options	**Model J-4200A** 1PH, 1.5HP, 115/230V (prewired 115V), 12/6A	**Model J-4300A** 1PH, 1.5HP, 115/230V, (prewired 115V), 12.6/6.3A	**Model J-4400A** 1PH, 1.5HP 115/230V (prewired 115V), 12.6/6.3A
	Model J-4200A-2 1PH, 1.5HP, 220V, 6A		
	Model J-4202A 3PH, 1.5HP, 230V/460V (prewired 230V), 4.6/2.3A	**Model J-4301A**, 3PH, 1.5HP 230V/460V (prewired 230V), 4.6/2.3A	**Model J-4401A** 3PH, 1.5HP, 230V/460V (prewired 230V), 4.6/2.3A
Sound emission (approx.)	80 dB idle; 85dB with load	80 dB idle; 85dB with load	80 dB idle; 85dB with load
Weight	250 lbs. (113 kg.)	211 lbs. (96 kg.)	164 lbs. (74 kg.)

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

6.0 Operating instructions

These sanders can be used to remove stock from a wide variety of machinable materials. Different materials require different grit types and grades to achieve the desired stock removal rate and surface finish. Please consult with your abrasive materials supplier for specific recommendations on the correct grit material and grade required for your specific needs.

When removing stock from soft materials (wood, plastic, etc.) these machines are typically called "sanders." When removing stock from hard materials (cast iron, steel, etc.) they are referred to as "grinders". The word "sander" is used, more-or-less consistently, throughout this manual. It refers to the machines and not the type of abrasive finishing being performed.

Before operating your sander, please read the basic instructions on safe machine usage on the preceding pages.

6.1 Belt sander

The sanding belt must be in good condition, at proper tension, and tracking correctly, before doing any sanding, grinding or other abrasive machining operations. Refer to the section on Track Mechanism Maintenance if you have any problems with belt tension or tracking.

6.2 Adjusting the belt sander table

You can tilt the table in a range between 20° upward and 45° downward. A single locking handle on the side of the table is used to lock and unlock the table to permit adjustment.

There are two positive lock stop positions: at 90° (that is, at a right angle to the platen) and at 45° downward (essentially 90° + 45° or 135° total to the platen.)

⚠CAUTION Never adjust the table angle while the sander is running. Always turn the motor off before adjusting the table angle.

To Tilt the Belt Sander Table:

1. Unlock the locking handle on the side of the table.
2. Using the pointer and scale, set the angle to any required angle between 20° upward and 45° downward.
3. Lock the lock handle.

To Tilt the Table to Exactly 45°:

1. Flip out the stop bracket (see Figure 20).
2. Unlock the locking handle.
3. Move the table until it contacts the stop bracket.
4. Lock the table lock handle.

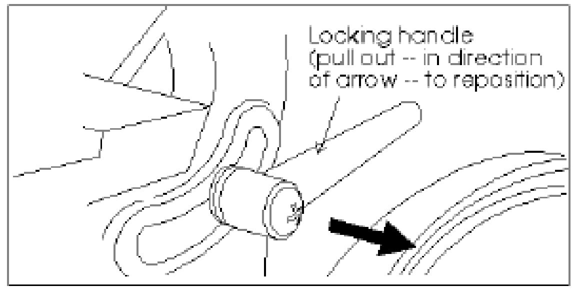


Figure 1: Locking handle for belt table

6.3 Using the indexing lock handle

The lock handle (Figure 1) is spring loaded and can be repositioned on its shaft to permit easy locking and unlocking.

To Reposition the Handle:

1. Pull outward against its spring.
2. Rotate the handle to the position you require.
3. Release the handle and its spring will return it to the correct operating position.

6.4 Adjusting the belt sander arm

The arm which holds the sanding belt can be positioned at a full vertical position, a full horizontal position, or at any angle in between which is convenient to the type of sanding you are doing.

A positive stop mechanism is used to permit quick adjustment to the vertical or horizontal positions.

⚠CAUTION Never adjust the arm angle while the sander is running. Always turn off the motor before adjusting the arm angle.

To adjust to vertical:

1. Unlock both lock bolts. These are located under the arbor cover.
2. Move the arm to vertical until it contacts its stop.
3. Tighten both lock bolts, and replace arbor cover.

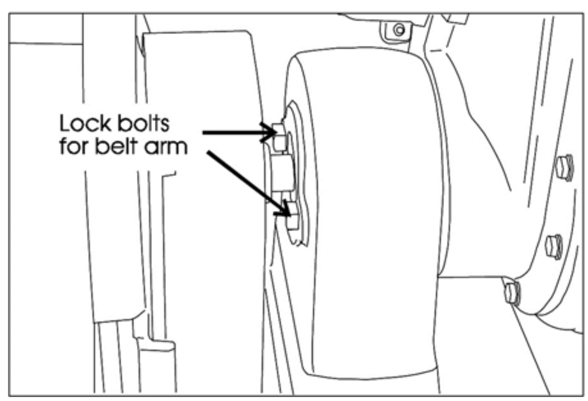


Figure 2: Lock bolts for belt arm

To adjust to horizontal:

1. Unlock both lock bolts.
2. Move arm to horizontal until it contacts its stop. (See Figure 3.)
3. Tighten both lock bolts and replace arbor cover.

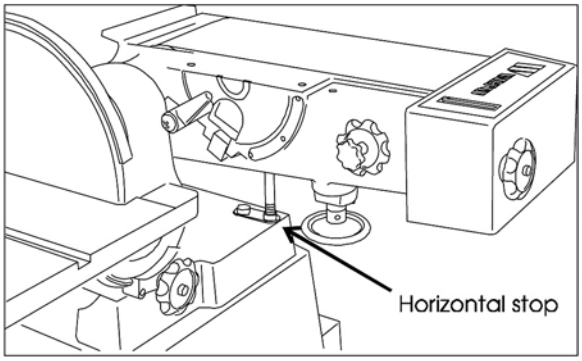


Figure 3: Arm at horizontal – note that the table is removed. The table may be removed or left in position, and may also be set to any angle to allow horizontal sanding of various angles.

To adjust arm to any angle between vertical and horizontal:

1. Unlock both lock bolts.
2. Use a machinist's protractor and level to set the arm to the required angle.
3. Tighten both lock bolts and replace arbor cover.

6.5 Adjusting disc sander table

⚠CAUTION Never adjust the table angle while the sander is running. Always turn off the motor before adjusting table angle.

1. Unlock the two locking knobs underneath the table at each end. (See Figure 4.)
2. Using the pointer and scale, set the angle to any required angle between 20° upward and 45° downward.
3. Lock the two locking knobs underneath the table.

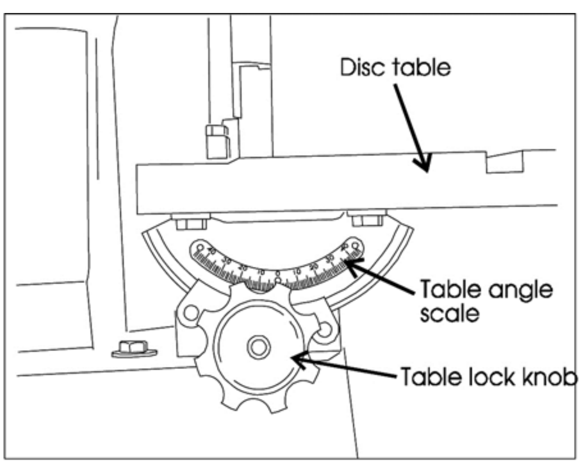


Figure 4: Disc sander table adjustment

6.6 Use of the Miter Gauge

The miter gauge can be used on either the disc or belt surfaces to sand accurate angles on workpieces. When using the gauge alone, you sand a single angle. However, by tilting the table and using the miter gauge in combination with the table tilt, it is possible to sand compound angles, as well.

When grinding a compound angle you should always check the accuracy of your setup by sanding a piece of scrap material before doing any finish sanding on the actual workpiece.

1. Set the angle you wish to sand using the scale on the miter gauge.
2. Tighten the miter gauge securely so the miter reference surface will not move while you are sanding.
3. Place the workpiece against the miter reference surface and slide it along the reference surface and into the sanding disc or belt. The basic method is shown in Figure 5, below.

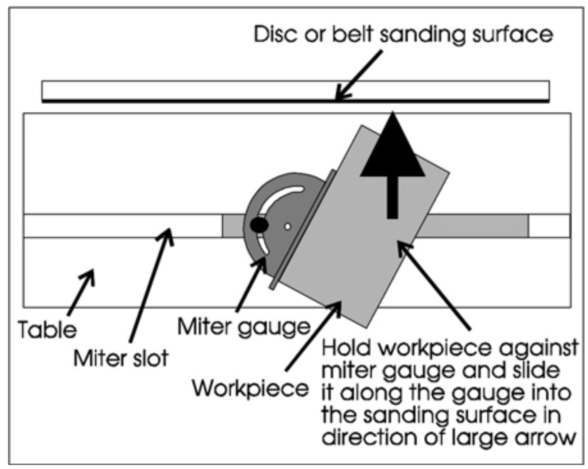


Figure 5: Use of the miter system

7.0 **Maintenance**

7.1 **Belt replacement**

1. Disconnect the power to the machine to prevent accidental start-ups. If the machine is plugged into an outlet, unplug it. If the machine is hardwired to a branch circuit with a junction box, remove the fuse or trip the circuit breaker to the branch.
2. Remove the lock knob and top cover (See Figure 6).

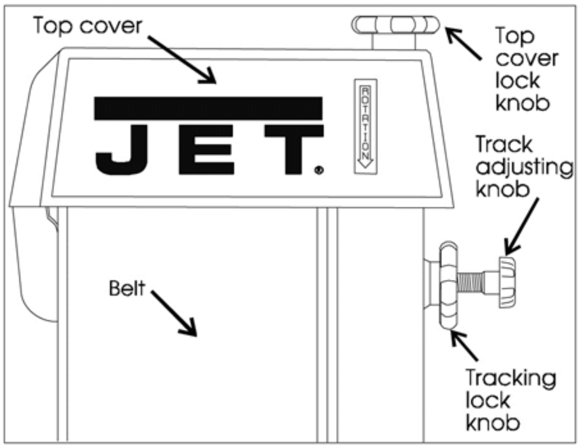


Figure 6: Top cover components

3. Remove the side guard and table.
4. Release the belt tension by turning the tension handle in a counterclockwise direction (See Figure 7). If the handle is difficult to turn, perform *Track mechanism maintenance* according to the instructions in section 7.2.

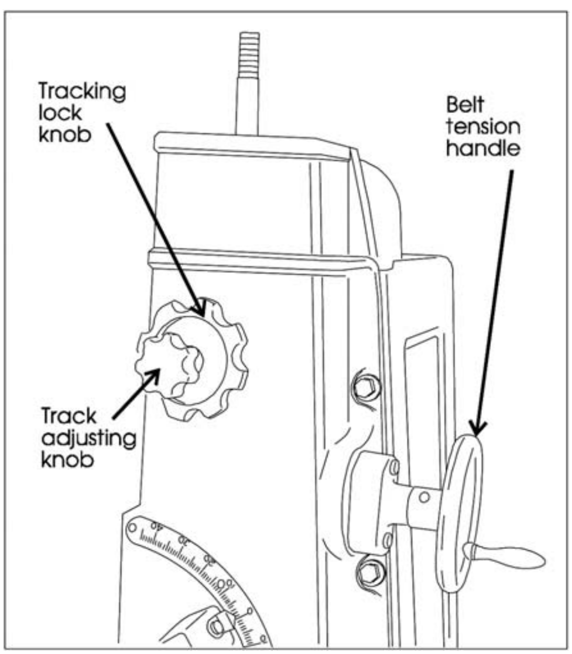


Figure 7: Belt adjustment components (Note top cover removed for removal and replacement of belt.)

5. Remove the belt.
6. Check the drums and platen for scoring or signs of wear which might require service or replacement.
7. Check the height of the platen with a straight edge. If it is not 1/32 inch above the drums, adjust it according to the instructions in *Platen Replacement or Adjustment* in the *Machine Setup* section of this manual.
8. Check the drums for looseness which might cause tracking problems. Correct any loose condition by tightening or replacing any parts as required.
9. Slip the new belt onto the drums and platen.
10. Adjust the tension handle clockwise until the belt is flat against the platen and there is no curling or buckling of the belt in the middle.
11. Turn the drums by hand to see if the belt tracks more-or-less true. JUST BECAUSE THE OLD BELT TRACKED CORRECTLY DOES NOT MEAN THE NEW BELT WILL. Always check the tracking when replacing a belt.
12. To adjust the tracking:

    12.1. Plug the machine back into the outlet or reestablish power in the branch.

    12.2. Loosen the tracking lock knob.

    12.3. Jog the motor on and off as necessary to observe the tracking, and turn the tracking knob as necessary to make the belt track in the center of the platen and drums. Turn the tracking knob clockwise to move the belt toward the right and counterclockwise to move the belt toward the left.

    12.4. When the belt seems to be tracking correctly, turn the motor on and leave it running while fine tuning the tracking.

    12.5. Lock the tracking lock knob.

    12.6. When the lock knob is secure, turn the power off and disconnect the machine from the outlet or branch as in Step 1, above.

13. Replace the table, side guard, top cover and lock knob by reversing steps 3 and 2, above.
14. If you have not already done so, reconnect the power to the machine and return it to service.

7.2 **Track mechanism maintenance**

While the use of a dust collection system can extend service intervals, an accumulation of dust will almost certainly require periodic cleaning of the tracking mechanism. The more continuous the use of the machine, the more frequently this maintenance should be performed.

As mentioned in the preceding section, the need for required maintenance is often indicated by difficulty in adjusting the tension/tracking mechanism.

1. With the belt removed according to the instructions in section 7.1 *Belt replacement*, pull out the upper tracking system and clean away all

built up material in the upper part of the bracket casting.

2. Take the two keys off of the idler pin bracket, wipe off, and re-grease.
3. Reverse the above steps to make the machine ready for reinstallation of the belt according to the *Belt replacement* instructions.

7.3 **Installing abrasive discs**

1. Disconnect power to the machine to prevent accidental start-ups.
2. Peel off the old abrasive disc.
3. Clean the drive disc surface using naptha or a similar nonflammable solvent that will dry film-free.
4. Pull the protective backing half off the new abrasive disc.
5. Position the new disc carefully so it is centered accurately on the drive disc. (See Figure 8.)
6. When accurately centered, remove the rest of the protective backing and press the abrasive disc firmly against the drive disc so complete adhesive contact is made.
7. Reconnect the power to the machine.

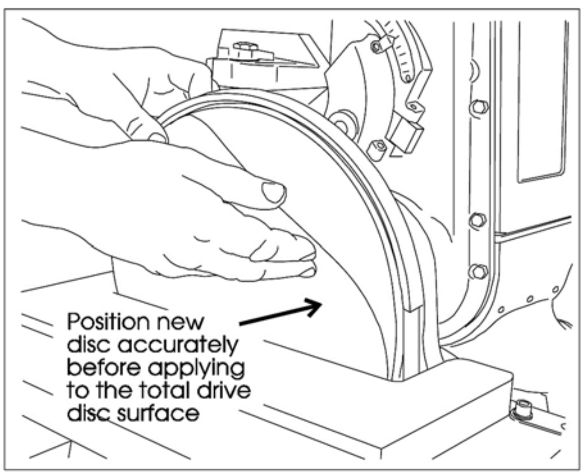


Figure 8: Installing new abrasive disc

7.4 **Replacing the v-belt**

1. Disconnect power to the machine to prevent accidental start-ups.
2. Remove the belt guard (Figure 9) and disc table.
3. Remove the table tilt lock knob (Figure 10).
4. Loosen the four motor bolts so the motor can slide on its plate.

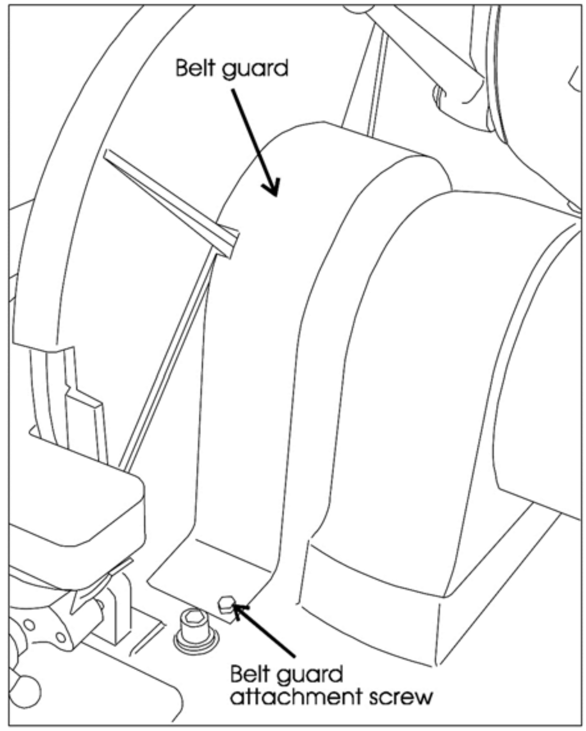


Figure 9: Removing belt guard

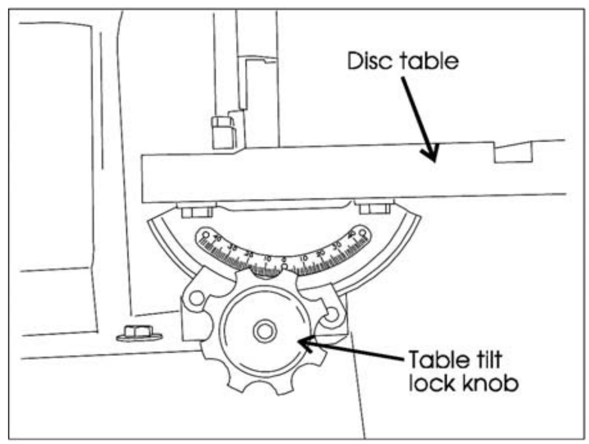


Figure 10: Disc table lock knob

5. Remove the belt from the motor pulley.
6. Remove three of the base mounting bolts, then loosen the fourth bolt slightly. This allows you to rotate the machine on the machine base (See Figure 11).
7. Remove the two bolts, underneath the machine casting, that secure the disc guard to the casting (See Figure 11).

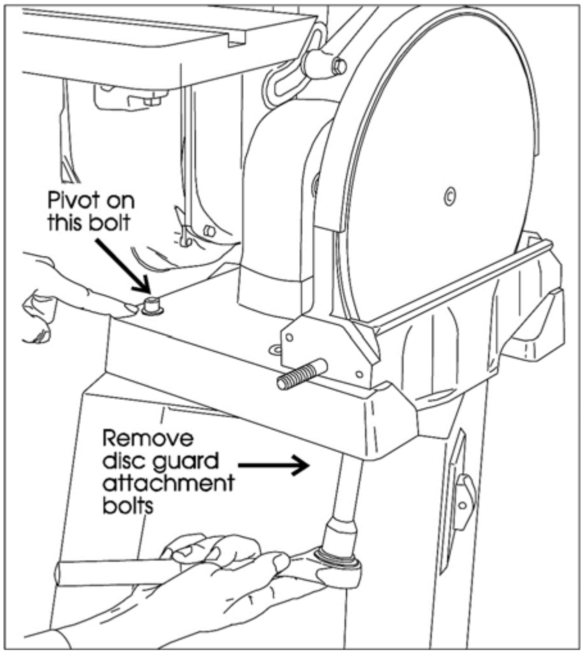


Figure 11: Rotating the machine casting to remove the disc guard bolts

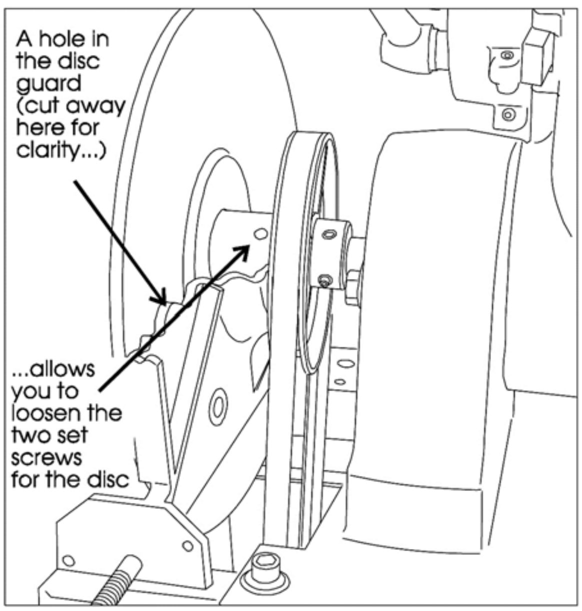


Figure 12: Locating the set screws that secure the disc to the arbor

8. Through the hole in the disc guard casting, locate and remove the TWO set screws that secure the drive disc to the arbor (Figure 12). One set screw clamps on the arbor key and the other clamps on the arbor shaft, itself. Be sure you loosen both of them.
9. Slide the disc and its guard off of the machine, together (See Figure 13).
10. The V-belt can now be removed from the drive arbor.
11. Install the new belt on the top pulley.

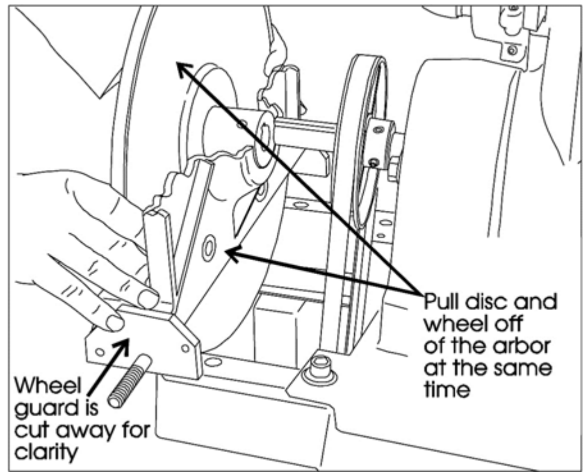


Figure 13: Removing the guard and drive disc, together.

12. Slide the disc and guard back into position.
13. Reinstall the disc guard bolts underneath the table.
14. Position the drive disc so that it is no more than 1/16 inch away from the table, then tighten BOTH of the set screws by inserting the hex wrench through the hole in the disc guard casting.
15. Rotate the machine back onto its base and secure it with all four mounting bolts.
16. Install the belt over the bottom pulley.
17. Tension the belt so that when pressed, in the middle of its travel, it has no more than one belt's width of movement – then tighten the four motor bolts.
18. Observe the alignment of the motor pulley and arbor pulley. If necessary, correct their alignment by shifting the motor slightly on its mount (which involves loosening and retightening the mounting bolts and checking tension) or by shifting the pulley slightly on the motor shaft (which involves loosening the motor pulley set screw and sliding the pulley into alignment) or by moving the arbor pulley slightly on its shaft (See Figure 14).
19. When the pulleys are accurately aligned, reinstall the belt guard.
20. Reestablish electrical power to the machine.

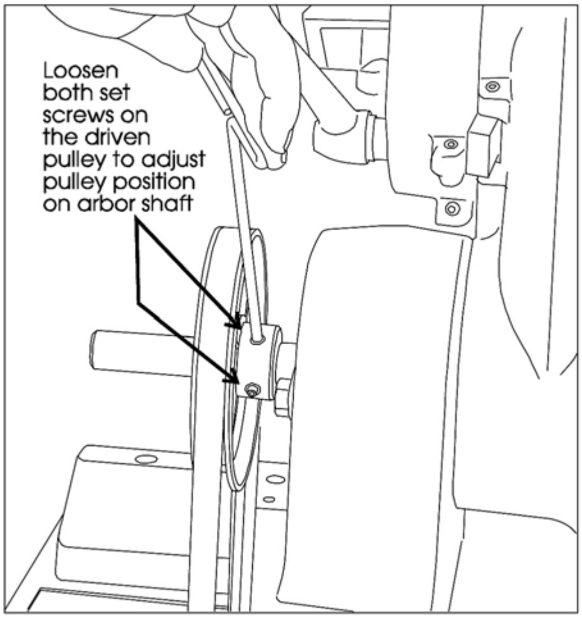


Figure 14: Loosening pulley set screws to allow the adjustment of pulley on arbor shaft.

8.0 Machine setup

8.1 Basic setup

1. Position the machine where it will be located on the shop floor. When positioning the machine, consider the type of work which will be done on it so you allow sufficient room not only for the workpieces, but also for service to the machine.
2. Open the door in the base of the machine and, using the holes in the base as a template, mark the floor for the position of the hold-down bolts.
3. Move the machine to expose the hold-down bolt marks and install anchors for the hold-down bolts.
4. Put the machine back over the hold-down anchors and bolt the machine securely to the shop floor. THIS MUST BE DONE FOR SAFE OPERATION OF THE MACHINE.
5. Establish an electrical service connection to the machine. This will vary according to the model purchased. ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A QUALIFIED ELECTRICIAN WHO IS FAMILIAR WITH YOUR STATE AND LOCAL CODES. Many models of these machines make use of high voltages which pose a significant risk of *serious injury or DEATH* if proper knowledge and precautions are not used. Electrical instructions are included in section 9.0 *Electrical connection*s.
6. Machines with belts are shipped with the belts in slack condition. During the electrical hookup phase of machine setup, the belt will have to be tightened and checked for tracking. See the *Belt Replacement* section for instructions on this procedure.

8.2 Disc table angle adjustment

1. Disconnect power to the machine to prevent accidental start-ups.
2. Loosen the table locking knobs on either end of the table.
3. Using a machinist's square against the table and disc, set the table at exactly 90° to the disc (See Figure 15).
4. Tighten the table locking knobs.
5. Check the pointer. If it is not exactly on the zero mark, loosen the pointer attaching screw, adjust the pointer, and retighten the screw.
6. Reconnect the power to the machine.

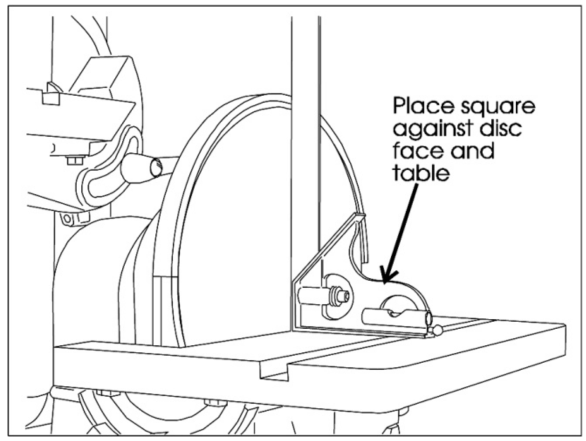


Figure 15: Using a square to check the disc table scale.

8.3 Disc table miter parallelism adjustment

1. Disconnect power to the machine to prevent accidental start-ups.
2. Set the table angle to zero.
3. Place a scale or adjustable machinist's square against either the left or right edge of the disc face and measure the distance to the miter slot edge (See Figure 16).

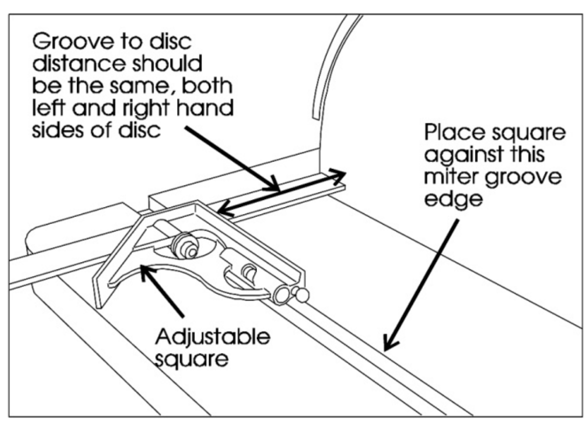


Figure 16: Using an adjustable square to set the table parallelism.

4. Move the measuring device to the opposite edge of the disc and measure the distance to the miter slot.
5. Adjust the table by loosening the four attachment screws under the table, then move the table until the distance between the miter slot and the disc is equal on both sides (See Figure 17).
6. Tighten the four attachment screws.
7. Reconnect the electrical power to the machine.

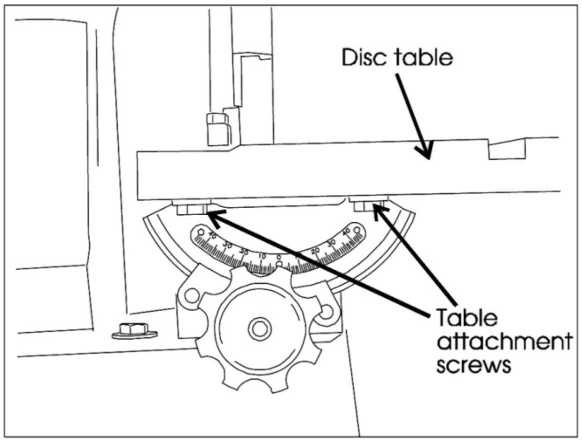


Figure 17: Table attachment screws – loosen to adjust miter groove parallelism.

8.4 Disc table gap adjustment

1. Using a scale, check the gap between the edge of the table and the face of the disc. It should be very close to 3/32 inch. If it is much more or less than that distance, adjust it as follows:
2. Disconnect the electrical power to the machine.
3. Using the access hole on the top of the disc guard, locate and loosen the two set screws that secure the disc to the shaft.
4. Slide the disc in or out along its shaft until the table-to-disc gap is 3/32 inch (See Figure 18).
5. Tighten both set screws.
6. Reconnect the electrical power to the machine.

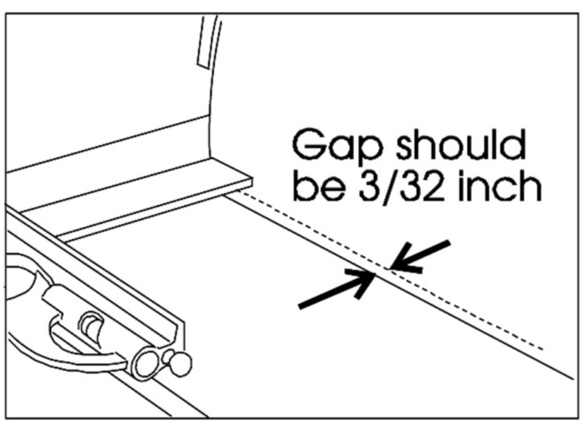


Figure 18: Table-to-disc gap measurement.

8.5 Belt table miter slot parallelism adjustment

1. Disconnect power to the machine to prevent accidental start-ups.
2. Set the table angle to zero.
3. Place a scale or adjustable machinist's square against either the left or right edge of the belt or platen and measure the distance to the miter slot edge (See Figure 19).
4. Move the measuring device to the opposite edge of the belt or platen and measure the distance to the miter slot.
5. Adjust the table by loosening the three attachment screws under the table, then move the table until the distance between the miter slot and belt or platen is equal on both sides.
6. Tighten the three attachment screws.
7. Reconnect the electrical power to the machine.

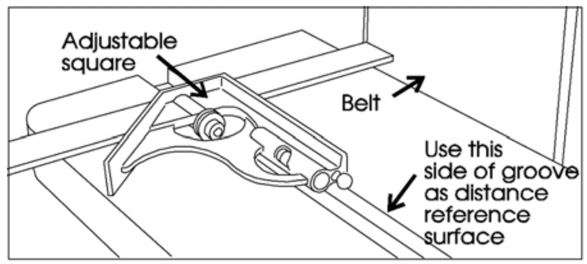


Figure 19: Using an adjustable square to check and set miter slot parallelism on the belt table.

8.6 Belt table angle adjustment

1. Loosen the table locking handle and tilt the table upward to about 15°.
2. Flip out the stop bracket (See Figure 21).
3. Lower the table until its adjusting screw touches the stop bracket.
4. Place a machinist's square against the table and belt or platen.
5. If adjustment is required, turn the adjusting screw (Figure 20) until the table is exactly square to the platen.
6. Check the pointer. If it is not on 0°, loosen the pointer screw and adjust the pointer until it is on 0°.
7. Tighten the pointer screw.
8. Loosen the table lock handle and tilt the table until its stop contacts the 45° stop position.
9. Using a machinist's protractor set on 135° (90° + 45°) adjust the screw until the table and platen are in correct adjustment. DO NOT reset the pointer after this operation.

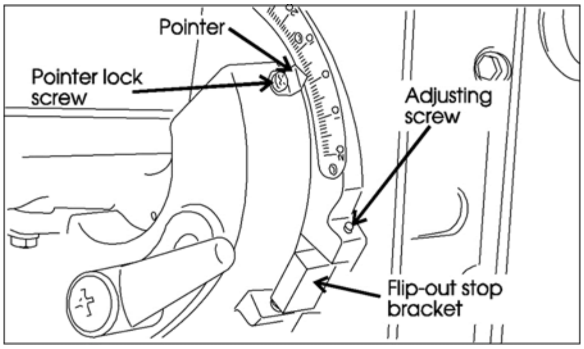


Figure 20: Location of adjustment (socket head) screws and pointer attachment screw for table angle adjustment.

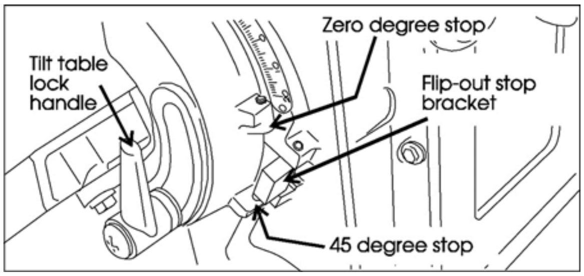


Figure 21: Locations of stop lugs and stop bracket for zero and 45° table positions.

8.7 **Adjusting or replacing the platen**

1. Disconnect the electrical power to the machine to prevent accidental start-ups.
2. Remove the top cover, side guard and belt as outlined in section 7.1, *Belt replacement*.
3. Remove the table by unscrewing the locking handling and lifting the complete table assembly, from the machine.
4. If you are replacing the platen, remove the three screws that hold it to its mount -- then install the new platen and replace the mounting screws finger tight.
5. If you are only adjusting the platen, loosen the three mounting screws to allow adjustment.
6. Using a straight edge as shown in Figure 22, adjust the platen height until it is 1/32 inch higher than the crown of both the drive and idler drums.
7. Tighten the platen adjustment screws.
8. Reinstall the table and belt.
9. Check and adjust, if necessary, the tracking of the belt according to instructions in section 7.1, *Belt replacement*.
10. Reinstall the guards and covers.
11. Check and adjust the table angles and miter slot squareness according to table adjustment instructions in this manual.
12. Reconnect the electrical power to the machine.

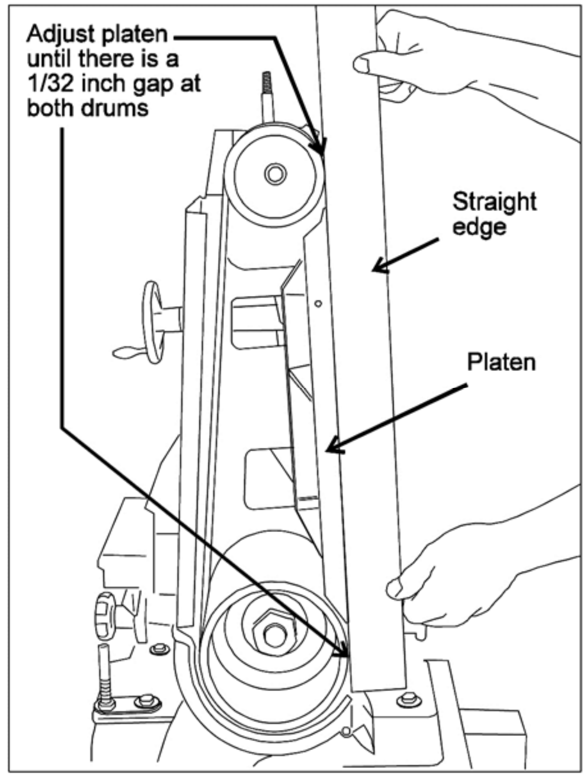


Figure 22: Method for adjusting height of platen above drive and idler drums.

9.0 **Electrical connections**

Caution: JET sanders are available in a wide variety of electrical configurations to meet the needs of the purchaser with respect to power available and compliance with electrical codes. Each machine is tested at the factory for operation before shipment and the power cord is tagged with the power requirements for the machine, as shipped. *HOWEVER, before attempting any electrical hookup, you should be certain:*

1. The electrical characteristics of the service branch match the requirements of the motor.
2. The service branch is equipped with wires of the required gauge or size.
3. The branch circuit intended for the machine is protected with a time delay fuse or circuit breaker with rated amperage just slightly greater than the full load current of the motor.

MOTOR AMPERAGE full load current

Phase	Voltage	Amperage
1	115	20
1	220	10
3	220	5.2
3	440	2.6

CAUTION **All electrical service work on your JET sander should be performed by a qualified, licensed electrician who is familiar with all safe standard electrical installation practices and all applicable electrical codes. This includes local electrical codes which may affect the connection and operation of the sander in your specific manufacturing operation.**

9.1 Single phase electrical hookup

When connecting your machine to single phase power, you may be connecting to either 115 or 230 volts, depending upon the motor type provided. Local codes may, or may not, permit the use of a plug type of connection for your machine. Where a plug connection is permitted, the following installation practices must be followed:

1. The plug used must be a grounding type of plug. That is, on a 115 volt single phase connection, the plug must be a three-prong plug with two flat, parallel blades for the power wires and a single rounded or U-shaped prong for the ground connection. On 230 volt single phase connections, the lug must be a three prong plug with two flat blades in tandem to carry the current, and a third round or U-shaped prong for the ground connection.
2. The service branch to which the plug is connected must be a branch with a separate ground wire so the grounding prong of the plug can be connected to ground effectively.

Note: Local electrical codes in many jurisdictions DO NOT ALLOW THE USE OF PLUG TYPE CONNECTIONS FOR SINGLE PHASE POWER WHEN THE MACHINE IS USED IN A COMMERCIAL OR INDUSTRIAL ESTABLISHMENT.

In these cases you must connect your machine to the service branch using a hardwired junction box connection.

Motor rotation

The motor's rotation should result in the belt sander moving downward and the disc sander rotating counterclockwise.

Voltage conversion

Single phase machines are pre-wired for 115V or 230V per customer request. If it becomes necessary to change the voltage, remove the back cover from the base and place the machine on its side. Remove the terminal cover from the motor. Rewire the motor according to the motor connection diagram in section 12.1. Different electrical plugs are required depending on which voltage you select. This completes the voltage conversion process.

Circuit protection

Where the service branch is protected with a fuse or circuit breaker that has too high a value to offer protection to the motor supplied, a fuse or circuit breaker box should be used at the point where the machine connection is made and the time delay fuse or circuit breaker should be a value just slightly higher than the maximum load current draw.

9.2 Three phase electrical hookup

1. Be certain the power to the branch you are connecting is off and locked out, so power cannot be reestablished accidentally.
2. Connect the ground wires. These wires will be either green, or green with a white stripe.
3. Connect the remaining three cable wires to the three power wires in the service branch.
4. Reestablish the power to the branch.

Motor rotation

The motor should be turning counterclockwise, the belt sander should be moving downward and the disc sander should be turning clockwise. If this is the case, the machine can be considered wired correctly. If the motor is not turning in the correct direction, take the following corrective action:

1. Disconnect power in the branch again and be certain it cannot be accidentally turned on while you correct the wiring.
2. Reverse ANY TWO of the power wires to the machine.
3. Reestablish the power to the machine.
4. Turn the machine on. The motor should now be turning in the correct direction.

Voltage conversion

Three phase machines are pre-wired for 230V or 460V per customer request. If it becomes necessary to change the voltage:

1. Remove back cover from the base and place machine on its side.
2. Remove terminal cover from motor. Rewire the motor according to the motor connection diagram in section 12.2.
3. Replace the current magnetic switch with the 460V switch (p/n 4202A-5095, purchased separately – see your dealer or contact JET to order).
4. This completes the voltage conversion process.

Circuit protection

Where the service branch is protected with a fuse or circuit breaker that has too high a value to offer protection to the motor supplied, a fuse or circuit breaker box should be used at the point where the machine connection is made and the time delay fuse or circuit breaker should be a value just slightly higher than the maximum load current draw.

10.0 **Troubleshooting**

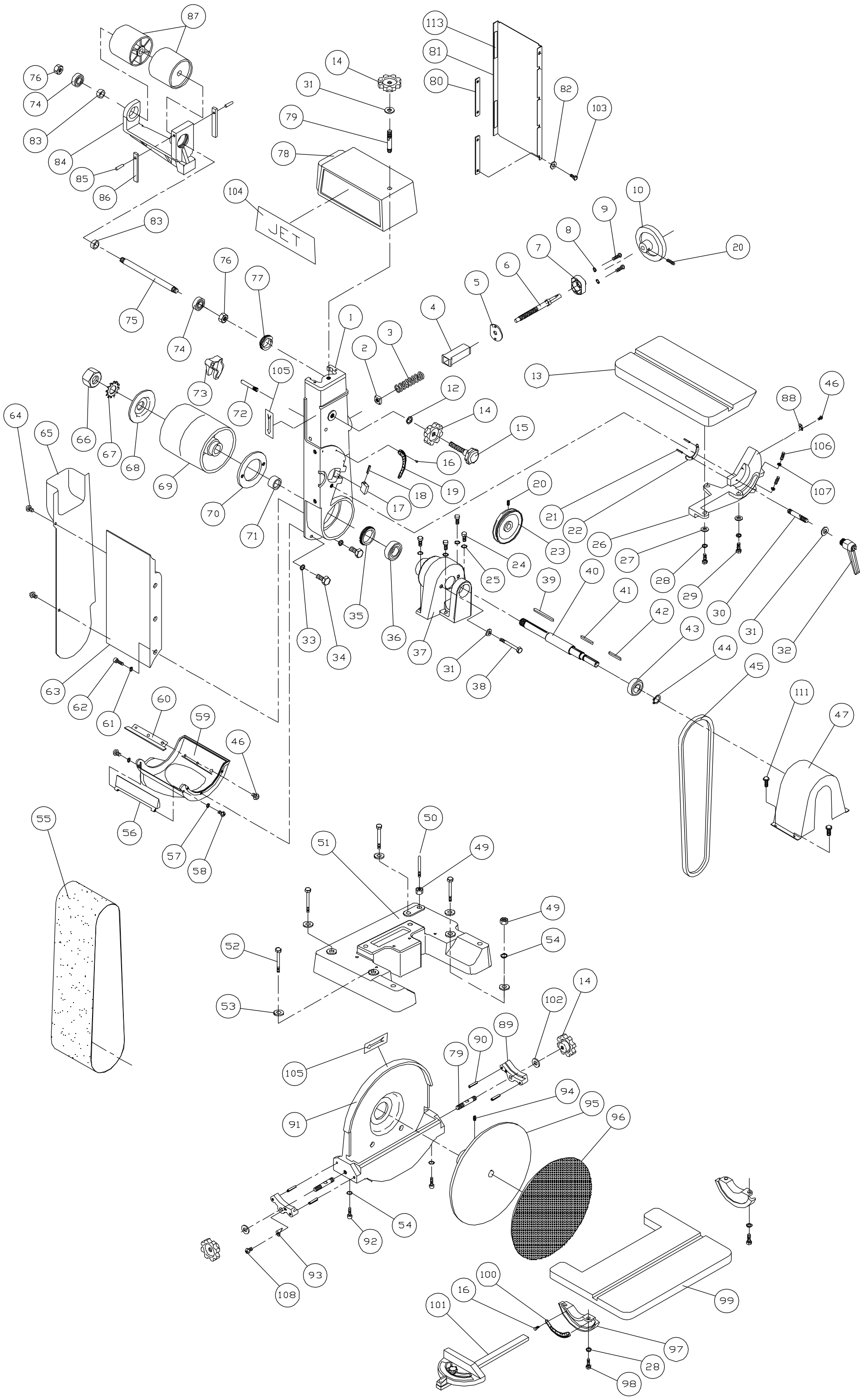
Symptom	**Possible Cause**	**Correction**
Motor will not run	Voltage is too low.	Check power supply for proper voltage.
	Branch circuit fuse is blown or circuit breaker is tripped.	Determine the reason for the blown fuse or tripped circuit breaker; then replace the fuse or reset the breaker.
	Branch is shut down for service.	Check all personnel and machines on the branch to be certain someone has not shut down the branch for service. DO NOT replace the fuse or reset the breaker unless you are certain no personnel are working on the machines, wires or controls in the circuit.
	Open circuit in the wiring.	Inspect all wire connections for loose or open connections.
	Motor is defective.	Replace the motor.
	Switch is defective.	Replace the switch.
Motor stalls easily	Low voltage.	Check for proper voltage at the motor; correct as necessary.
	Fuse blown (three phase motors only).	Replace the blown fuse.
	Improper wiring.	Check for proper connections.
Abrasive belt or disc slows down although motor keeps running at working speed	Belt is slipping.	Replace the belt.
Poor tracking	Tracking is out of adjustment.	Adjust the belt tracking.
	Too much belt tension.	Loosen the tension until the belt is just taut.
	Not enough belt tension.	Tighten the tension until the belt is more taut.
	Belt is jointed improperly.	Check belt for an irregular seam or shape.
	Lack of crown on the drive roller.	Remove the belt and put a straight edge along the drive roller. There should be a slight crown (high spot toward the middle of the roller.) If the crown has worn away, replace the roller.
	Worn bearings.	Check all the bearings for excessive heat or loose shafts. Replace if necessary.
Unsteady belt	Slack in the abrasive belt	Adjust the belt tension.
Short belt life	Excessive pressure applied while grinding.	Allow the belt to do the cutting. Excessive pressure only dulls the grit and removes it from the cloth.
	Working on only one side of the belt or only in one area of the disc.	Use all surface areas of the abrasive cloth.
	Incorrect abrasive material or grit size.	Check with your abrasives supplier for recommendations on the type and coarseness of the abrasive required for the workpieces you are sanding or grinding.

CAUTION: For all of the electrical faults and corrections in the above table JET recommends the use of a qualified and licensed electrician for all circuit tracing, diagnosis and repair.

11.0 **Replacement parts**

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, www.jettools.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

11.1.1 **Model J-4200A Belt and Disc Sander Assembly – Exploded View**

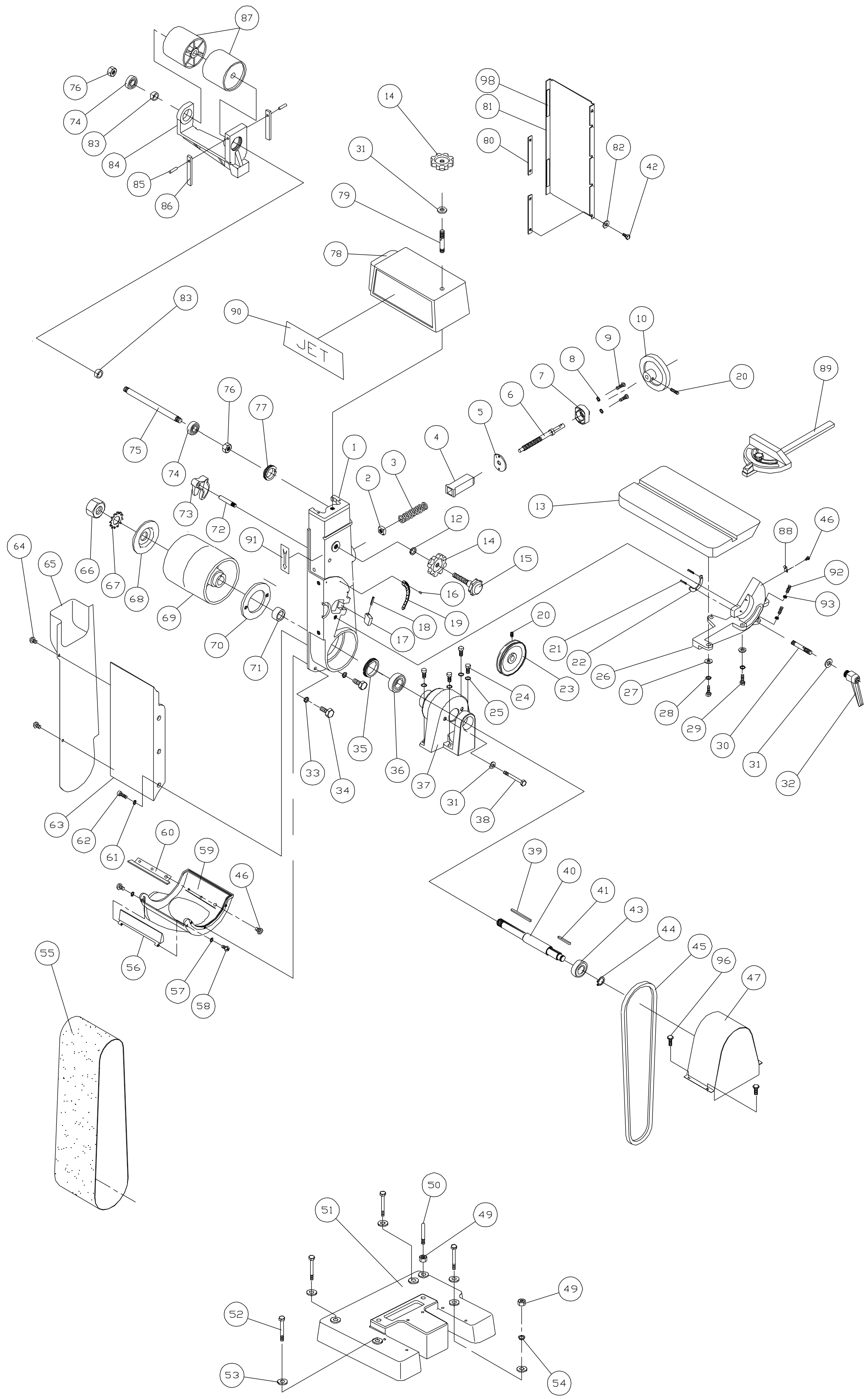


11.1.2 **Model J-4200A Belt and Disc Sander Assembly – Parts List**

Index No	Part No	Description	Size	Qty
1	J-5508427	Bracket		1
2	5511833	Square Nut	M10	1
3	5051081	Spring		1
4	5051091	Sleeve		1
5	5051131	Collar		1
6	5508431	Shaft with Collar		1
7	J-5051151	Cap		1
8	TS-2361051	Lock Washer	M5	2
9	TS-1513051	Socket Head Flat Screw	M5x25	2
10	5051721	Hand Wheel		1
12	TS-1550071	Flat Washer	M10	2
13	J-5508432	Tilting Table		1
14	5508450	Hand Knob		4
15	5508429	Belt Adjustment Knob	M10	1
16	5511824	Drive Screw	Ø2x5	5
17	5508437	Stop Lock		1
18	5511828	Groove Pin	Ø5x45	1
19	5051351	Tilting Scale		1
20	TS-1523011	Socket Set Screw	M6x6	2
21	5511827	Groove Pin	Ø4x8	2
22	5051331	Segment		1
23	5511725	4200 Arbor Pulley		1
24	TS-1504061	Socket Head Cap Screw	M8x30	4
25	TS-2361081	Lock Washer	M8	4
26	J-5508433	Trunnion		1
27	TS-1550061	Flat Washer	M8	9
28	TS-2361081	Lock Washer	M8	9
29	TS-1490041	Hex Cap Screw	M8x25	3
30	5508435	Stud	M10	1
31	TS-1550071	Flat Washer	M10	4
32	5508436	Acorn Nut and Handle		1
33	TS-2361061	Lock Washer	M6	3
34	TS-1482031	Hex Cap Screw	M6x16	3
35	5508439	Preload Bushing	M54	1
36	BB-6205ZZ	Ball Bearing	6205ZZ	1
37	J-5508438	Bearing Housing		1
38	TS-2210951	Hex Cap Screw	M10x140	2
39	5051421	Key	5x5x70 mm	1
40	5508441	Drive Shaft		1
41	5051451	Key	5x5x35 mm	1
42	4200A-042	Key	5x5x55 mm	1
43	BB-6204ZZ	Ball Bearing	6204ZZ	1
44	5051471	Retaining Ring	S20	1
45	VB-A59	V-Belt	17610	1
46	TS-2245081	Socket Head Flat Screw	M5x8	4
47	J-5508444	Belt Guard Assembly		1
49	TS-1540071	Hex Nut, Full	M10	5
50	5508446	Stop Pin		1
51	J-5508447	Base		1
52	TS-2210801	Hex Cap Screw	M10x80	4
53	TS-1550071	Flat Washer	M10	8
54	TS-2361101	Lock Washer	M10	6
55	5051841	Garnet Belt		1
56	J-5508455	Deflector Plate		1
57	TS-2361051	Lock Washer	M5	2
58	TS-1513021	Socket Head Flat Screw	M5x12	2
59	J-5508454	Drive Drum Guard		1
60	5508456	Dust Deflector		1
61	TS-2361101	Lock Washer	M10	3
62	TS-1491021	Hex Cap Screw	M10x20	3

Index No	Part No	Description	Size	Qty
63	J-5508457	Platen		1
64	TS-1514011	Socket Head Flat Screw	M6x12	2
65	J-5051601A	Side Guard		1
66	TS-1540231	Hex Nut	M24x18	1
67	9058121	Lock Washer, Ext	M24	1
68	5051981	Spacer		1
69	5051971A	Drive Drum		1
70	5508458	Clamp Ring		1
71	5544728	Drum Spacer		2
72	5051031	Tension Lever Pin		1
73	5051021	Belt Tension Lever		1
74	BB-6202ZZ	Ball Bearing	6202ZZ	2
75	5508461	Idler Drum Shaft with Lock Nut		1
76	TS-2342121	Nylon Lock Hex Nut	M12	2
77	5508460	Bearing Lock Nut		1
78	J-5051591A	Idler Drum Guard		1
79	5508462	Stud		3
80	5508463	Clamp Bar		2
81	J-5052121	Bottom Guard		1
82	TS-2361061	Lock Washer	M6	4
83	5052061B	Idler Drum Spacer		2
84	J-5508459	Idler Pin Bracket		1
85	TS-0367061	Roll Pin	1/4"x1-1/4"	2
86	5052001	Block		2
87	5052061A	Idler Drum		2
88	5508434	Pointer		1
89	5508451	Clamp with Pins		2
90	4200A-090	Roll Pin	Ø6x45	4
91	J-5508453	Disc Guard		1
92	TS-2239551	Socket Head Cap Screw	M10x55	2
93	5051741	Pointer		1
94	TS-1523031	SHSS	M6x10	2
95	5051641	Disc, Aluminum		1
96	5051631	Garnet Disc		1
97	5051681	Trunnion		2
98	TS-1490041	Hex Cap Screw	M8x25	4
99	J-5508449	Table		1
100	5051701	Tilting Table Scale		1
101	5052271	Deluxe Miter Gauge		1
102	TS-1550071	Flat Washer	M10	2
103	TS-1482032	Hex Cap Screw	M6x16	4
104	4200A-104J	JET Logo Plate		1
105	4200A-105	Label, Direction		2
106	TS-1482081	Hex Cap Screw	M6x40	2
107	TS-1540041	Hex Nut, Full	M6	2
108	TS-1523021	Socket Head Flat Screw	M6x8	1
111	5511818	Flat Head Screw	M5x6	4
113	4200A-113	Sponge	300x7.5mm, t=2mm	2

11.2.1 **Model J-4300A Belt Sander Assembly – Exploded View**

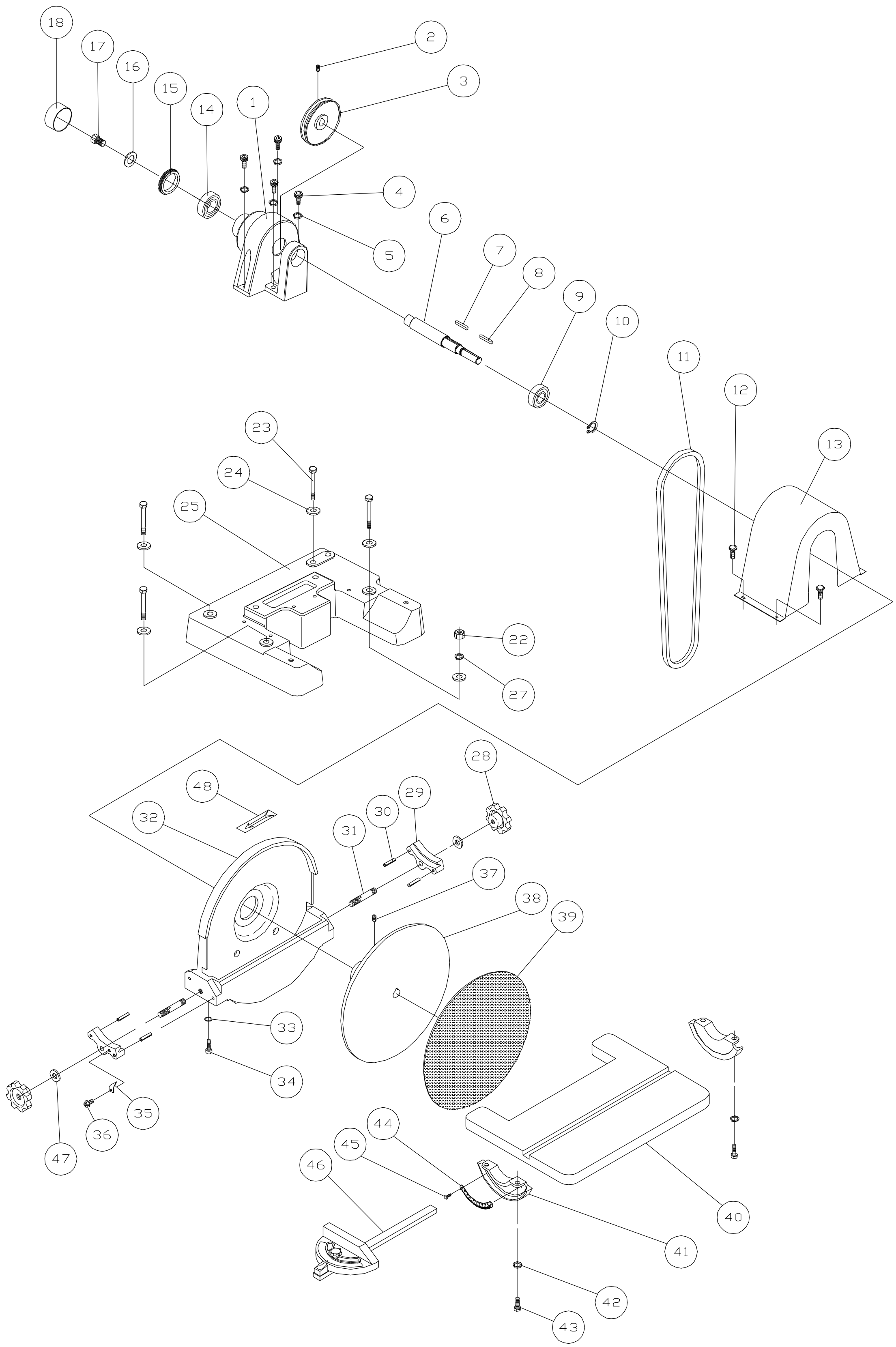


11.2.2 **Model J-4300A Belt Sander Assembly – Parts List**

Index No	Part No	Description	Size	Qty
1	J-5508427	Bracket		1
2	5511833	Square Nut	M10	1
3	5051081	Spring		1
4	5051091	Sleeve		1
5	5051131	Collar		1
6	5508431	Shaft with Collar		1
7	J-5051151	Cap		1
8	TS-2361051	Lock Washer	M5	2
9	TS-1513051	Socket Head Flat Screw	M5x25	2
10	5051721	Hand Wheel		1
12	TS-1550071	Flat Washer	M10	1
13	J-5508432	Tilting Table		1
14	5508450	Hand Knob		2
15	5508429	Belt Adj. Knob	M10	1
16	5511824	Drive Screw	Ø2x5	3
17	5508437	Stop Lock		1
18	5511828	Groove Pin	Ø5x45	1
19	5051351	Tilting Scale		1
20	TS-1523011	Socket Set Screw	M6x6	2
21	5511827	Groove Pin	Ø4x8	2
22	5051331	Segment		1
23	5511725	4200 Arbor Pulley		1
24	TS-1504061	SHCS	M8x30	4
25	TS-2361081	Lock Washer	M8	4
26	J-5508433	Trunnion		1
27	TS-1550061	Flat Washer	M8	3
28	TS-2361081	Lock Washer	M8	3
29	TS-1490041	Hex Cap Screw	M8x25	3
30	5508435	Stud	M10	1
31	TS-1550071	Flat Washer	M10	4
32	5508436	Acorn Nut and Handle		1
33	TS-2361061	Lock Washer	M6	3
34	TS-1482031	Hex Cap Screw	M6x16	3
35	5508439	Preload Bushing	M54	1
36	BB-6205ZZ	Ball Bearing	6205ZZ	1
37	J-5508438	Bearing Housing		1
38	TS-2210951	Hex Cap Screw	M10x140	2
39	5051421	Key	5x5x70	1
40	5508442	Drive Shaft		1
41	5051451	Key	5x5x35	1
42	TS-1482034	Hex Cap Screw	M6x16	4
43	BB-6204ZZ	Ball Bearing	6204ZZ	1
44	5051471	Retaining Ring	S20	1
45	VB-A59	V-Belt	17610	1
46	TS-2245081	Socket Head Flat Screw	M5x8	4
47	5508445	Belt Guard Assembly		1
49	TS-1540071	Hex Nut, Full	M10	5
50	5508446	Stop Pin		1
51	J-5508448	Base		1
52	TS-2210801	Hex Cap Screw	M10x80	4
53	TS-1550071	Flat Washer	M10	8
54	TS-2361101	Lock Washer	M10	6
55	5051841	Garnet Belt		1
56	J-5508455	Deflector Plate		1
57	TS-2361051	Lock Washer	M5	2
58	TS-1513021	Socket Head Flat Screw	M5x12	2
59	J-5508454	Drive Drum Guard		1
60	5508456	Dust Deflector		1
61	TS-2361101	Lock Washer	M10	3
62	TS-1491021	Hex Cap Screw	M10x20	3

Index No	Part No	Description	Size	Qty
63	J-5508457	Platen		1
64	TS-1514011	Socket Head Flat Screw	M6x12	2
65	J-5051601A	Side Guard		1
66	TS-1540231	Hex Nut	M24x18	1
67	9058121	Lock Washer, Ext	M24	1
68	5051981	Spacer		1
69	5051971A	Drive Drum		1
70	5508458	Clamp Ring		1
71	5544728	Drum Spacer		1
72	5051031	Tension Lever Pin		1
73	5051021	Belt Tension Lever		1
74	BB-6202ZZ	Ball Bearing	6202ZZ	2
75	5508461	Idler Drum Shaft with Lock Nut		1
76	TS-2342121	Nylon Lock Hex Nut	M12	2
77	5508460	Bearing Lock Nut		1
78	J-5051591A	Idler Drum Guard		1
79	5508462	Stud		1
80	5508463	Clamp Bar		2
81	J-5052121	Bottom Guard		1
82	TS-2361061	Lock Washer	M6	4
83	5052061B	Idler Drum Spacer		2
84	J-5508459	Idler Pin Bracket		1
85	TS-0367061	Roll Pin	1/4”x1-1/4”	2
86	5052001	Block		2
87	5052061A	Idler Drum		2
88	5508434	Pointer		1
89	5052271	Deluxe Miter Gauge		1
90	4200A-104J	JET Logo Plate		1
91	4200A-105	Label, Direction		1
92	TS-1482081	Hex Cap Screw	M6x40	2
93	TS-1540041	Hex Nut, Full	M6	2
96	5511818	Pan Head Screw	M5x6	4
98	4200A-113	Sponge	300x7.5mm,t=2mm	2

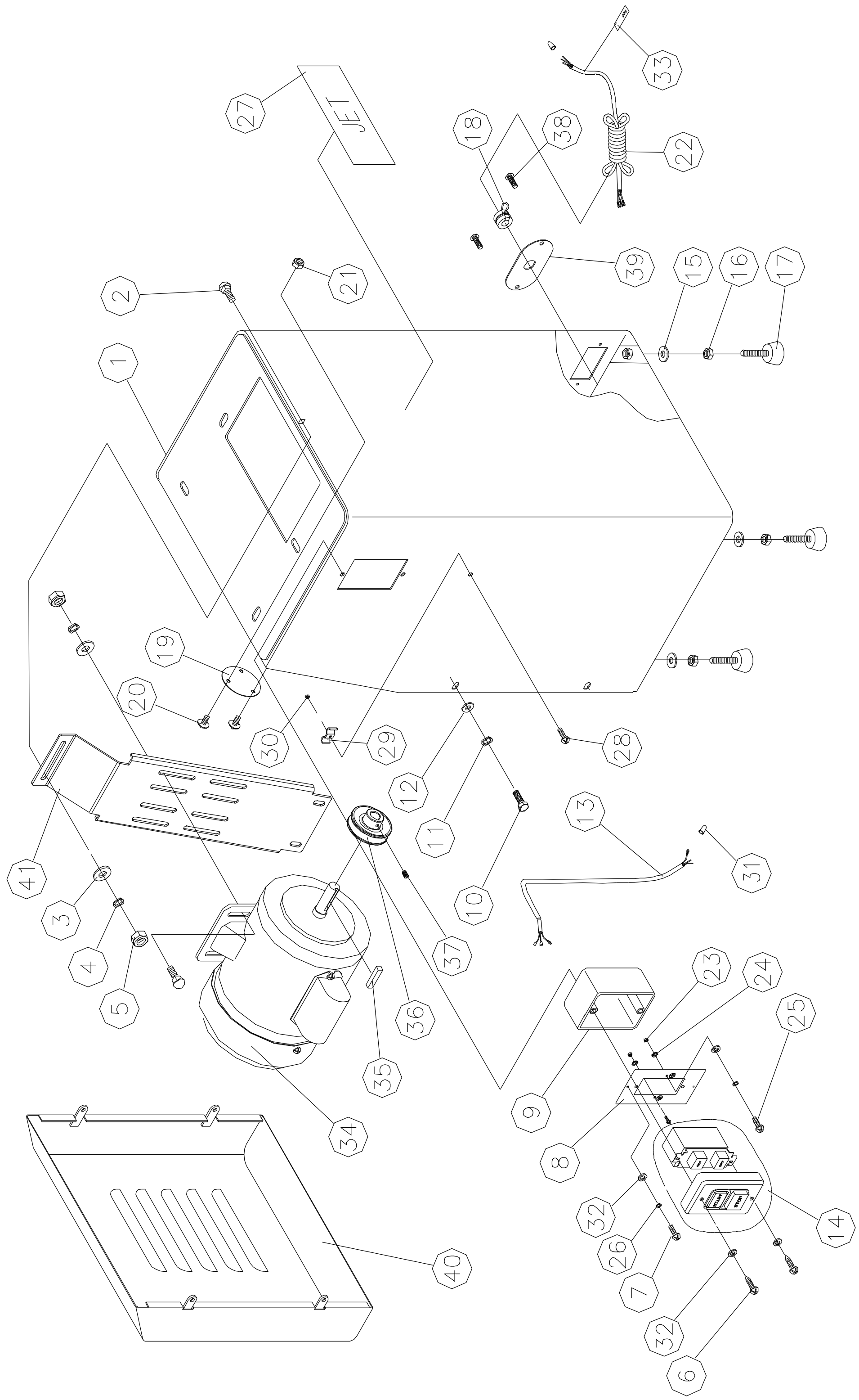
11.3.1 **Model J-4400A Disc Sander Assembly – Exploded View**



11.3.2 **Model J-4400A Disc Sander Assembly – Parts List**

Index No	Part No	Description	Size	Qty
1	J-5508438	Bearing Housing		1
2	TS-1523011	Socket Set Screw	M6x6	2
3	5511725	4200 Arbor Pulley		1
4	TS-1504061	SHCS	M8x30	4
5	TS-2361081	Lock Washer	M8	4
6	5508443	Drive Shaft		1
7	5051451	Key	5x5x35 mm	1
8	4200A-042	Key	5x5x55 mm	1
9	BB-6204ZZ	Ball Bearing	6204ZZ	1
10	5051471	Retaining Ring	S20	1
11	VB-A59	V-Belt	17610	1
12	5511818	Flat Head Screw	M5x6	4
13	J-5508444	Belt Guard Assembly		1
14	BB-6205ZZ	Ball Bearing	6205ZZ	1
15	5508439	Preload Bushing	M54	1
16	TS-1550061	Flat Washer	M8	1
17	TS-1490031	Hex Cap Screw	M8x20	1
18	4400A-018	Glue Bushing		1
22	TS-1540071	Hex Nut, Full	M10	4
23	TS-2210801	Hex Cap Screw	M10x80	4
24	TS-1550071	Flat Washer	M10	8
25	J-5508447	Base		1
27	TS-2361101	Lock Washer	M10	4
28	5508450	Hand Knob		2
29	5508451	Clamp with Pins		2
30	4200A-090	Roll Pin	Ø6x45	4
31	5508462	Stud		2
32	J-5508453	Disc Guard		1
33	TS-2361101	Lock Washer	M10	2
34	TS-2239551	Socket Head Cap Screw	M10x55	2
35	5051741	Pointer		1
36	TS-1523021	Socket Head Flat Screw	M6x8	1
37	TS-1523031	Socket Set Screw	M6x10	2
38	5051641	Disc Aluminum		1
39	5051631	Garnet Disc		1
40	J-5508449	Table		1
41	5051681	Trunnion		2
42	TS-2361081	Lock Washer	M8	4
43	TS-1490041	Hex Cap Screw	M8x25	4
44	5051701	Tilting Table Scale		1
45	5511824	Drive Screw	Ø2x5	2
46	5052271	Deluxe Miter Gauge		1
47	TS-1550071	Flat Washer	M10	2
48	4200A-105	Label, Direction		1

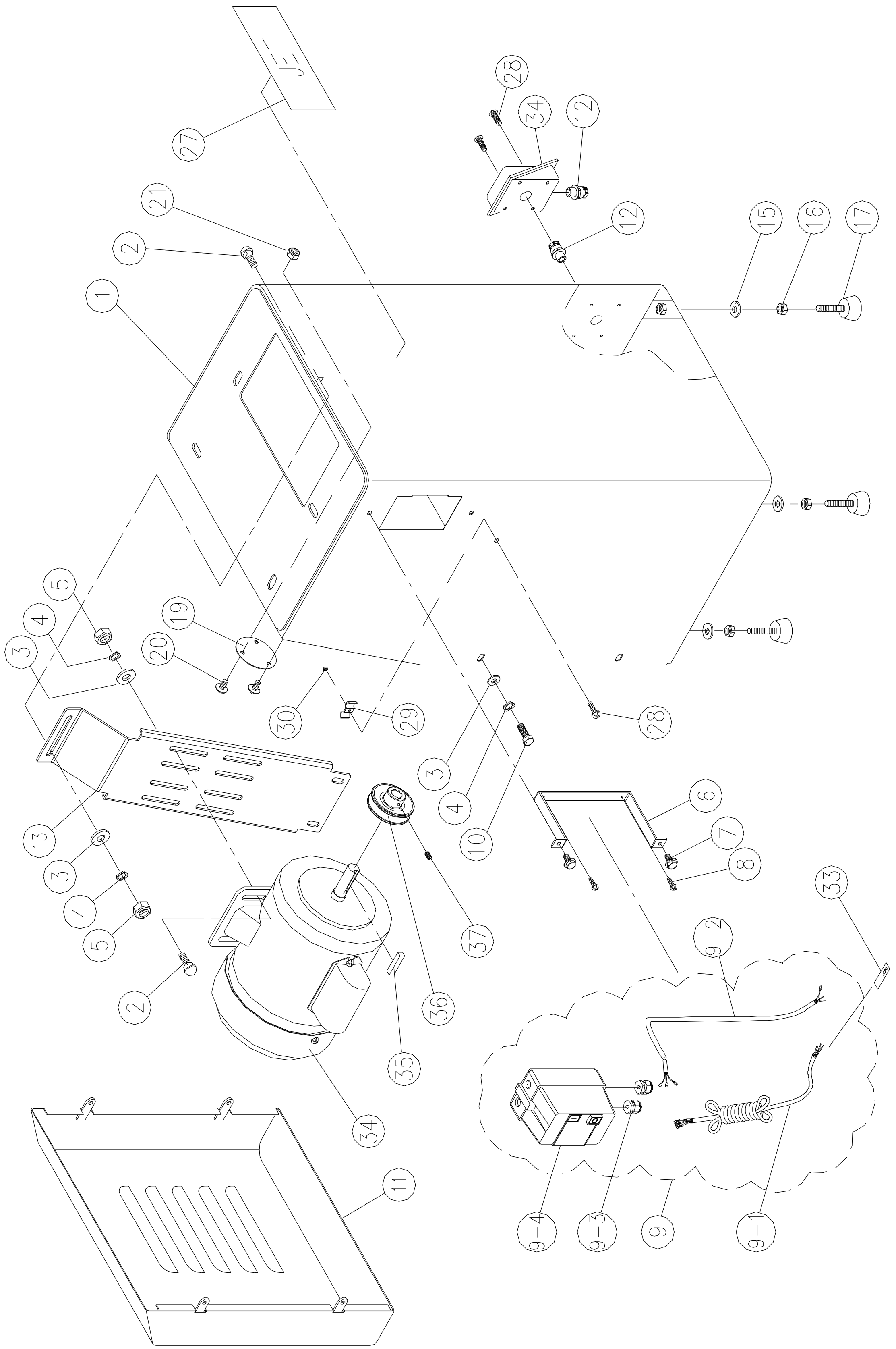
11.4.1 **Base Assembly: Model J-4300A, 1 Phase – Exploded View**



11.4.2 **Base Assembly: Model J-4300A, 1 Phase – Parts List**

Index No	Part No	Description	Size	Qty
1	J-5511743	Enclosure		1
2	TS-1490031	Hex Cap Screw	M8x20	7
3	TS-1550061	Flat Washer	M8	7
4	TS-2361081	Lock Washer	M8	7
5	TS-1540061	Hex Nut	M8	7
6	5511753	Tapping Bolt w/Washer		2
7	TS-2284082	Pan Head Screw	M4x8	2
8	4200A-B335	Switch Cover		1
9	5514703	Switch Box		1
10	TS-1490021	Hex Cap Screw	M8x16	4
11	TS-2361081	Lock Washer	M8	4
12	TS-1550061	Flat Washer	M8	4
13	4200A-B336	Motor Cord	1PH	1
14	9139391	Switch		1
15	TS-2360121	Flat Washer	M12	4
16	TS-1540081	Hex Nut	M12	4
17	5511745	Adjustable Mount		4
18	4200A-418	Strain Relief Bushing	6N3-4	1
19	4200A-B320	Cover		1
20	4200A-B321	Pan Head Bolt w/Flange	M6x12	3
21	TS-1540041	Hex Nut	M6	3
22	9133081	Power Cord	1PH	1
23	TS-1540031	Hex Nut	M5	2
24	TS-0733203	Lock Washer, Ext	M5	2
25	4200A-B325	Pan Head Screw	M5X8	2
26	TS-2361041	Lock Washer	M4	4
27	JETLOGO-1	JET Logo	2-3/4”x8”	1
28	TS-1533052	Pan Head Screw	M5x16	1
29	4200A-B330	Cord Clamp		1
30	TS-1540031	Hex Nut	M5	1
31	4200A-B332	Wiring Nut		2
32	TS-1550021	Flat Washer	M4	6
33	4200A-B334	Label – Voltage		1
34	J-5514650	Motor	1-1/2HP 115/230V 1Ph.	1
35	5512937	Key	5x5x35 mm	1
36	4200A-436	Motor Pulley		1
37	TS-1523011	Socket Set Screw	M6x6	1
38	TS-1533042	Pan Head Screw	M5X12	2
39	4200A-439	Strain Relief Plate		1
40	J-5511729	Large Cover		1
41	J-5052431	Motor Mounting Plate		1
	9145531	Machine Safety Label (not shown)		1

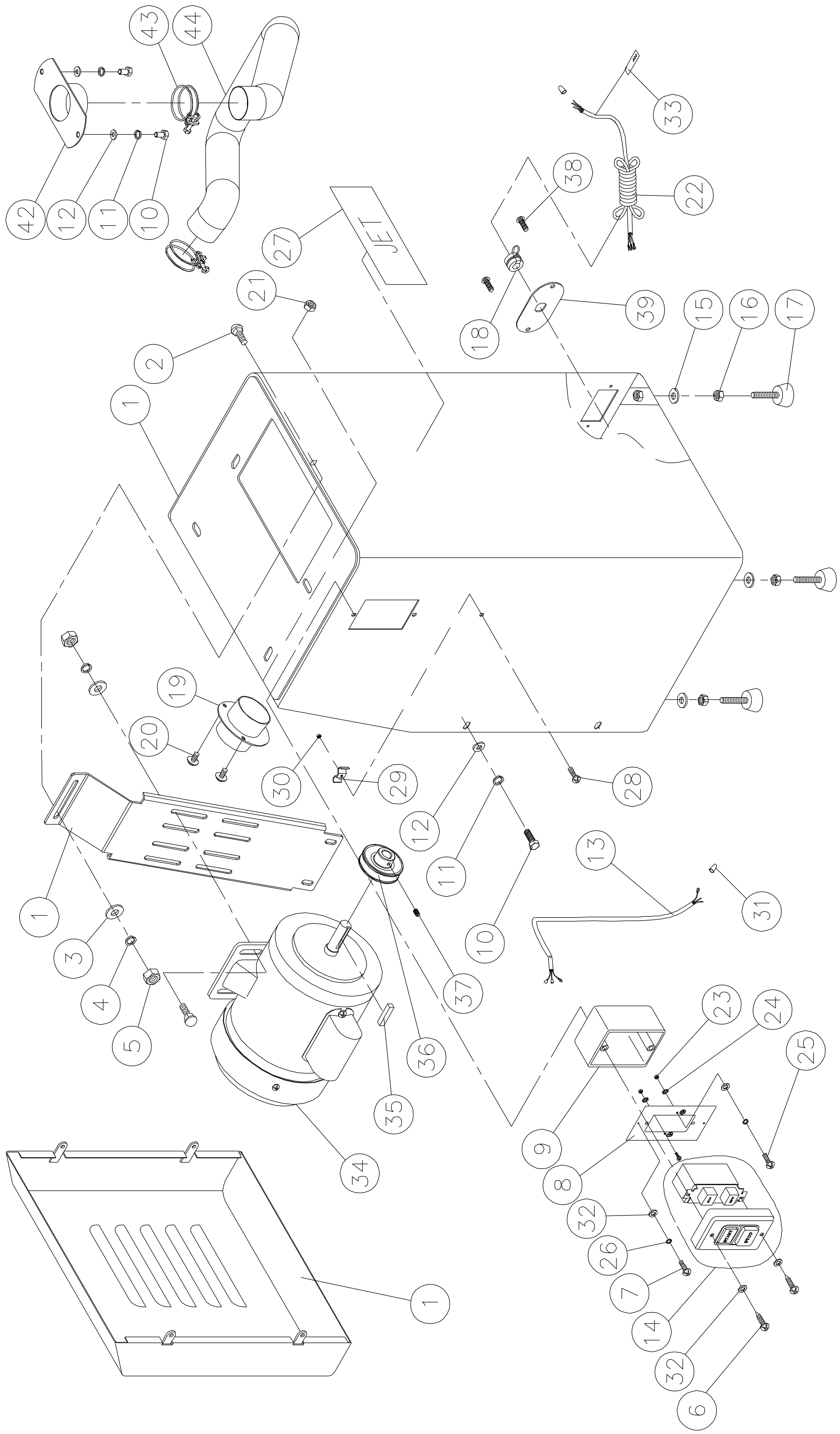
11.5.1 **Base Assembly: Model J-4300A, 3 Phase – Exploded View**



11.5.2 **Base Assembly: Model J-4300A, 3 Phase – Parts List**

Index No	Part No	Description	Size	Qty
1	4202A-501	Enclosure		1
2	TS-1490031	Hex Cap Screw	M8x20	7
3	TS-1550061	Flat Washer	M8	11
4	TS-2361081	Lock Washer	M8	11
5	TS-1540061	Hex Nut	M8	7
6	4202A-506	Switch Seat		1
7	4202A-507	Pan Head Screw w/Flange	M8x12	2
8	TS-1532042	Pan Head Screw	M4x12	2
9	4202A-509	Magnetic Switch Assembly	1.5HP	1
9-1	4202A-5091	Power Cord	3Ph.	1
9-2	4202A-5092	Motor Cord	3Ph.	1
9-3	4202A-5093	Strain Relief	PG13.5	2
9-4	4202A-5094	Magnetic Switch	1.5HP/230V/3PH	1
9-4	4202A-5095	Magnetic Switch	1.5HP/460V/3PH	1
10	TS-1490021	Hex Cap Screw	M8x16	4
11	J-5511729	Large Cover		1
12	4200A-5093	Strain Relief	PG13.5	2
13	J-5052431	Motor Mounting Plate		1
15	TS-2360121	Flat Washer	M12	4
16	TS-1540081	Hex Nut	M12	4
17	5511745	Adjustable Mount		4
19	4200A-B320	Cover		1
20	4200A-B321	Pan Head Bolt w/Flange	M6x12	3
21	TS-1540041	Hex Nut	M6	3
27	JETLOGO-1	JET Logo	2-3/4"x8"	1
28	TS-1533052	Pan Head Screw	M5x16	3
29	4200A-B330	Cord Clamp		1
30	TS-1540031	Hex Nut	M5	1
33	4200A-B334	Label – Voltage		1
34	J-5514651	Motor	1-1/2HP 230/460V 3Ph.	1
35	5512937	Key	5x5x35 mm	1
36	4200A-436	Motor Pulley		1
37	TS-1523011	Set Screw	M6x6	1
	9145531	Machine Safety Label (not shown)		1

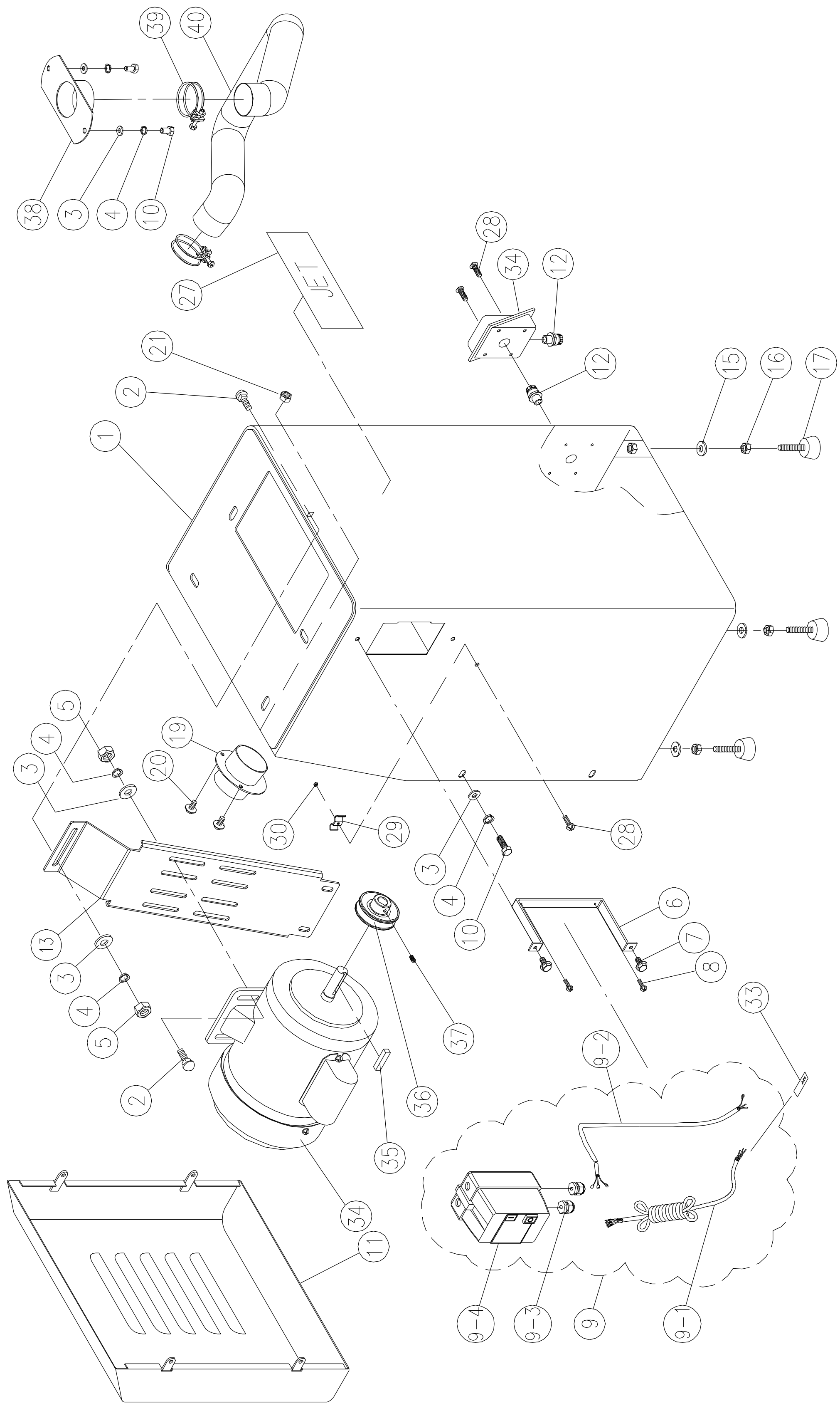
11.6.1 **Base Assembly: Model J-4200A & 4400A, 1 Phase – Exploded View**



11.6.2 **Base Assembly: Model J-4200A & 4400A, 1 Phase – Parts List**

Index No	Part No	Description	Size	Qty
1	AB605418	Enclosure		1
2	TS-1490031	Hex Cap Screw	M8x20	7
3	TS-1550061	Flat Washer	M8	7
4	TS-2361081	Lock Washer	M8	7
5	TS-1540061	Hex Nut	M8	7
6	5511753	Tapping Bolt w/Washer		2
7	TS-2284082	Pan Head Screw	M4x8	2
8	4200A-B335	Switch Cover		1
9	5514703	Switch Box		1
10	TS-1490021	Hex Cap Screw	M8x16	6
11	TS-2361081	Lock Washer	M8	6
12	TS-1550061	Flat Washer	M8	6
13	4200A-B336	Motor Cord	1PH	1
14	9139391	Switch		1
15	TS-2360121	Flat Washer	M12	4
16	TS-1540081	Hex Nut	M12	4
17	5511745	Adjustable Mount		4
18	4200A-418	Strain Relief Bushing	6N3-4	1
19	605416	Dust Port	2”	1
20	4200A-B321	Pan Head Bolt w/Flange	M6x12	3
21	TS-1540041	Hex Nut	M6	3
22	9133081	Power Cord	1PH	1
23	TS-1540031	Hex Nut	M5	2
24	TS-0733203	Lock Washer, Ext	M5	2
25	4200A-B325	Pan Head Screw	M5X8	2
26	TS-2361041	Lock Washer	M4	4
27	JETLOGO-1	JET Logo	2-3/4”x8”	1
28	TS-1533052	Pan Head Screw	M5x16	1
29	4200A-B330	Cord Clamp		1
30	TS-1540031	Hex Nut	M5	1
31	4200A-B332	Wiring Nut		2
32	TS-1550021	Flat Washer	M4	6
33	4200A-B334	Label, Voltage		1
34	J-5514650	Motor	1-1/2HP 115/230V 1Ph	1
35	5512937	Key	5x5x35 mm	1
36	4200A-436	Motor Pulley		1
37	TS-1523011	Socket Set Screw	M6x6	1
38	TS-1533042	Pan Head Screw	M5X12	2
39	4200A-439	Strain Relief Plate		1
40	J-5511729	Large Cover		1
41	J-5052431	Motor Mounting Plate		1
42	605415	Inlet Adaptor	2”	1
43	605417	Wire Hose Clamp	2”(53mm)	2
44	HS240007	Aluminum Hose	2”x714mm	1
	9145531	Machine Safety Label (not shown)		1

11.7.1 **Base Assembly: Model J-4200A & 4400A, 3 Phase – Exploded View**



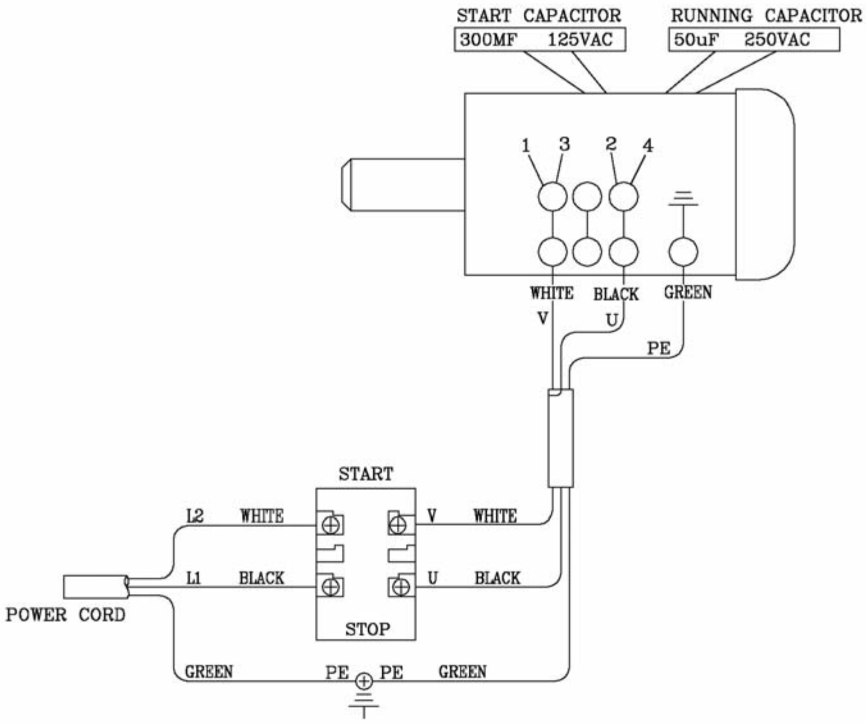
11.7.2 **Base Assembly: Model J-4200A & 4400A, 3 Phase – Parts List**

Index No	Part No	Description	Size	Qty
1	AB605419	Enclosure		1
2	TS-1490031	Hex Cap Screw	M8x20	7
3	TS-1550061	Flat Washer	M8	13
4	TS-2361081	Lock Washer	M8	13
5	TS-1540061	Hex Nut	M8	7
6	4202A-506	Switch Seat		1
7	4202A-507	Pan Head Screw w/Flange	M8x12	2
8	TS-1532042	Pan Head Screw	M4x12	2
9	4202A-509	Magnetic Switch Assembly	1.5HP	1
9-1	4202A-5091	Power Cord	3Ph.	1
9-2	4202A-5092	Motor Cord	3Ph.	1
9-3	4202A-5093	Strain Relief	PG13.5	2
9-4	4202A-5094	Magnetic Switch	1.5HP/230V/3PH	1
9-4	4202A-5095	Magnetic Switch	1.5HP/460V/3PH	1
10	TS-1490021	Hex Cap Screw	M8x16	6
11	J-5511729	Large Cover		1
12	4200A-5093	Strain Relief	PG13.5	2
13	J-5052431	Motor Mounting Plate		1
15	TS-2360121	Flat Washer	M12	4
16	TS-1540081	Hex Nut	M12	4
17	5511745	Adjustable Mount		4
19	605416	Dust Port	2”	1
20	4200A-B321	Pan Head Bolt w/Flange	M6x12	3
21	TS-1540041	Hex Nut	M6	3
27	JETLOGO-1	JET Logo	2-3/4”x8”	1
28	TS-1533052	Pan Head Screw	M5x16	3
29	4200A-B330	Cord Clamp		1
30	TS-1540031	Hex Nut	M5	1
33	4200A-B334	Label Voltage		1
34	J-5514651	Motor	1-1/2HP 230/460V 3Ph.	1
35	5512937	Key	5x5x35 mm	1
36	4200A-436	Motor Pulley		1
37	TS-1523011	Set Screw	M6x6	1
38	605415	Inlet Adaptor	2”	1
39	605417	Wire Hose Clamp	2”(53mm)	2
40	HS240007	Aluminum Hose	2”x714mm	1
	9145531	Machine Safety Label (not shown)		1

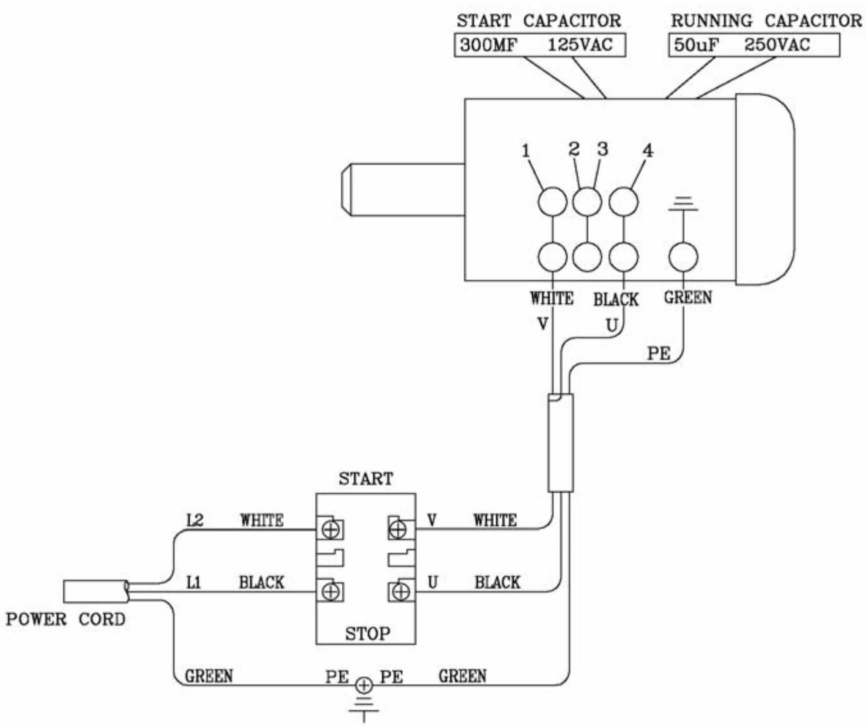
12.1 **Electrical schematic – single phase**

1 Phase

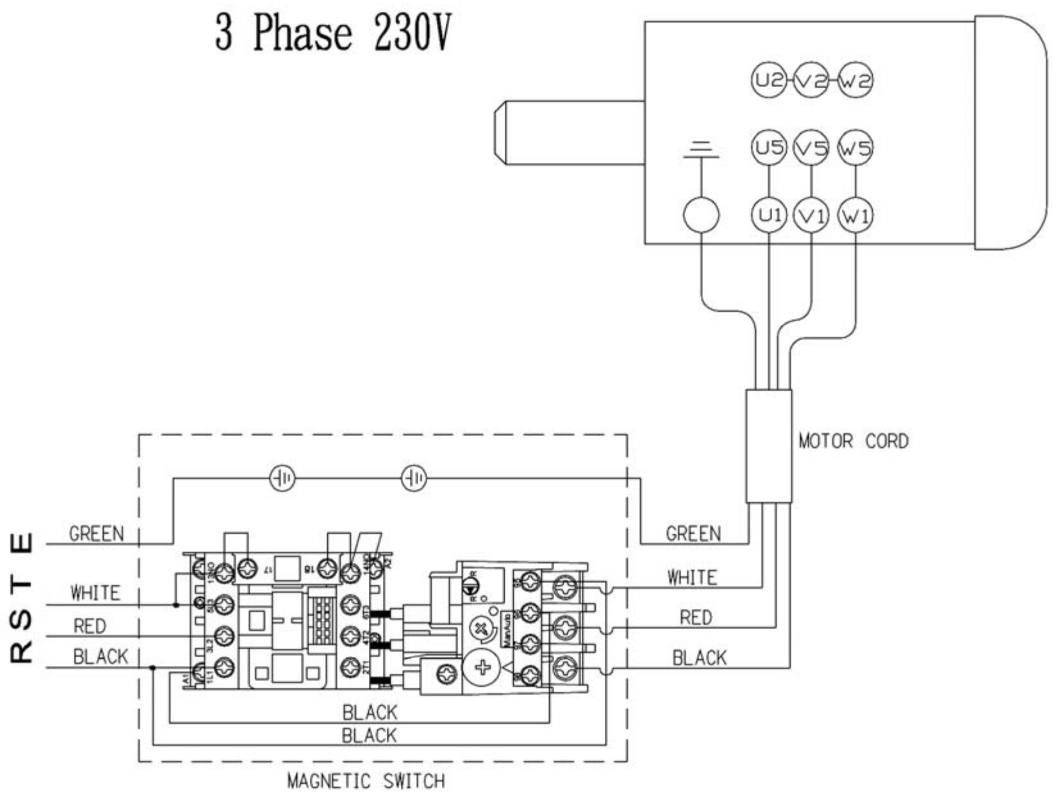
Electrical Schematic-115V

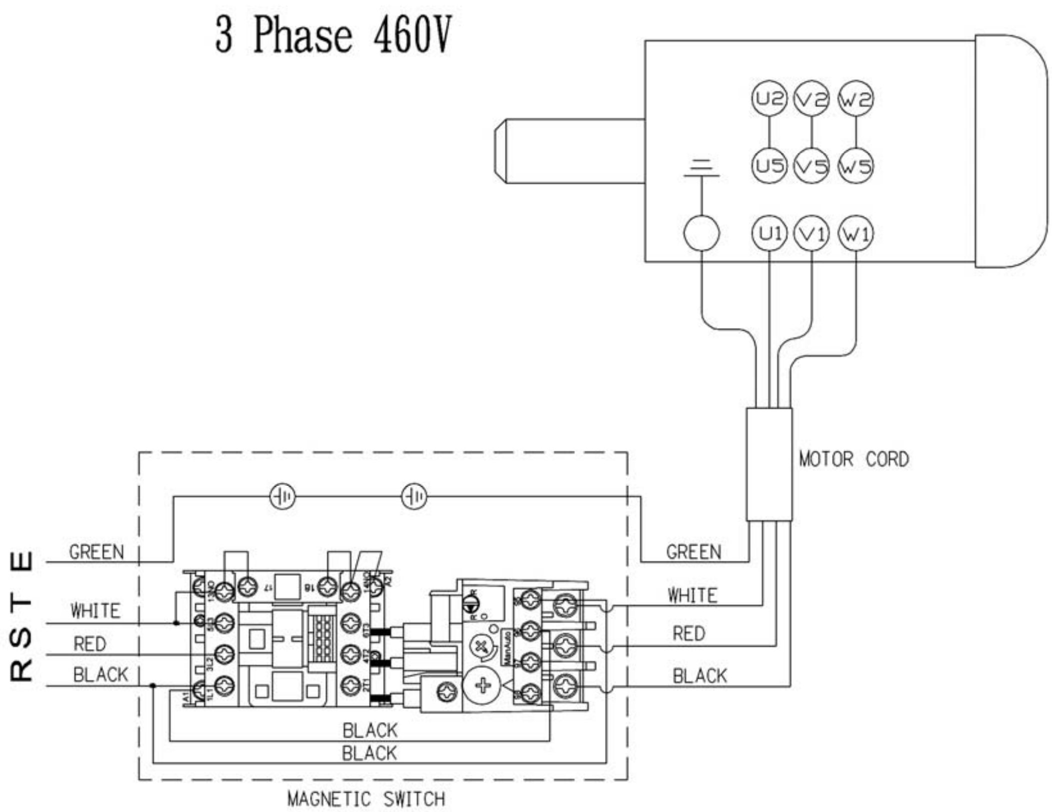


Electrical Schematic-230V



12.2 **Electrical schematic – 3 phase**





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